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ABSTRACT

This packet contains a curriculum guide, teacher's guide, and simulations for a course in information processing. The curriculum guide contains the essential elements, a suggested scope and sequence, student competencies for the courses, an outline of course content, teacher activities, a list of recommended equipment, a competency checklist, and descriptions of special products for the course. The teacher's guide contains six sections that cover the following course topics: (1) introduction to business information processing; (2) word processing; (3) business communications; (4) information management tools; (5) information processing tools; and (6) closure of business information processing course. Each section contains a competency matrix for domains and basic skills and one or more units each containing a lesson plan, a content outline, teaching suggestions, activities, unit overview and a student competency test with answers. Eight appendixes contain the following: names and addresses for 48 publishers, 129 computer software vendors, 5 microcomputer directories, 14 electronic information services, 90 magazines, periodicals, newsletters, and journals, 5 services and reports, and 24 professional organizations; a course competency checklist; a suggested equipment list; suggestions for articulation; course descriptions; office education essential elements; lesson plan development tips; and suggestions for modifying the course for special needs students. The simulations package provides students with realistic business activities coordinated with the curriculum guide. Planned for use with microcomputers, the simulations are provided for word processing, databases, spreadsheets, desktop publishing, and telecommunications. (KC)

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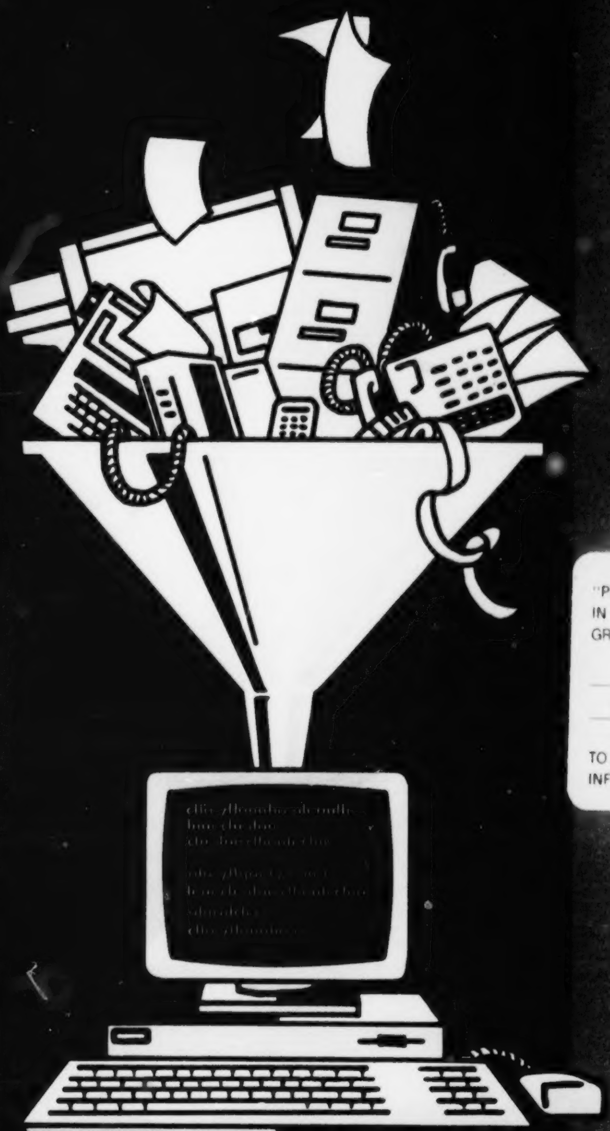

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Business Information Processing

Curriculum Guide

Revised Edition
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Essential Elements

Business Information Processing

Changes Made to Essential Elements State Board Approval Pending

75.87 (c) **Business Information Processing I (1, 2, or 3 units) shall include the following essential elements:**

(1) Concepts and skills related to effective communication and production of business documents. The student shall be provided opportunities to:

(A) demonstrate proficiency in business English, spelling, and proofreading;

(B) Identify and apply correct format for business correspondence and documents and mail merge;

(C) demonstrate word processing procedures to steps in document production;

(D) demonstrate proficiency in transcription; and

(E) use proper techniques in business telephone usage.

(2) Concepts and skills related to business information management. The student shall be provided opportunities to:

(A) identify procedures for controlling manual records by applying terminology and procedures for indexing, coding, and filing alphabetically;

(B) demonstrate procedures for automated management of business records, including use of database management software for storage, retrieval, manipulation, selection, and reporting of records; and

(C) identify business applications of electronic spreadsheets and demonstrate fundamental concepts and operational procedures related to their use.

(3) Concepts and skills related to management of information flow out of, into, and within an office. The student shall be provided opportunities to:

(A) demonstrate computer-aided preparation and distribution of personalized correspondence, using electronic mail;

(B) identify tools for preparing information for mass distribution and demonstrate desktop publishing and presentation graphic techniques;

(C) Apply the concepts of using communication systems both for accessing and using on-line information services, for transmission of outgoing information, and utilization of electronic bulletin boards; and

- (D) *demonstrate transportation of electronic images.*

(4) *Identify characteristics of contemporary office systems related to information processing and management. The student shall be given opportunities to:*

- (A) *identify and/or observe office activity related to information processing and information management;*
- (B) *identify responsibilities and procedures involved in business information processing with individuals working in the field;*
- (C) *read and discuss current literature related to business information processing; and*
- (D) *identify emerging information processing tools and understand their impact on business information processing.*

(5) *Concepts and skills associated with the social implications of computers. The student shall be provided opportunities to:*

- (A) *examine issues concerning responsible use of computer systems;*
- (B) *understand the social ramifications of computer applications related to privacy, values, and reliability of systems.*

Note: These variations were made with the approval of the State Director of Office Education in order to meet the computer requirements of some colleges and universities in the State.

Suggested Scope and Sequence

Business Information Processing

SECTION/UNIT	TITLE	WEEKS	HRS.
I.	**Introduction to Business Information Processing**		
1	Introduction to the Course	.5	3
2	Contemporary Office Systems	2	10
3	Social Implications	2	10
II.	**Word Processing**		
1	Word Processing Procedures	2	10
2	Document Production Procedures	2	10
III.	**Business Communications**		
1	Writing Techniques	2	10
2	Telephone Techniques	2	10
3	Transcription Techniques	2	10
IV.	**Information Management Tools**		
1	Records Control	2	10
2	Database	2	10
3	Spreadsheets	2	10
V.	**Information Processing Tools**		
1	Telecommunications	2	10
2	Desktop Publishing	3	15
VI.	**Closure**		
1	Closure for Business Information Processing	.5	2
	Total Weeks/Hours Allocated	**26**	**130**

Ten weeks have been set aside to cover the common essential elements, review, makeup work, and testing.

Student Competencies

Introduction to Business Information Processing

Introduction to the Course

NONE

Contemporary Office Systems

1. Define terminology related to information processing in the contemporary office.
2. Describe the organization of the office environment and the responsibilities required.
3. Discuss the information processing cycle.
4. Discuss hardware used in business.
5. Describe software used in business.
6. Identify emerging technology that impacts business information processing by using current literature.

Social Implications

1. Define terminology related to computer crime, computer users, and new computer devices and techniques.
2. Identify major issues and technological developments related to computers and society.
3. Describe ethical and legal issues that have arisen as a result of the computer revolution.
4. Identify privacy issues involved with electronic data storage.
5. Explain reasons for concern about the reliability of computer systems.

Word Processing

Word Processing Procedures

1. Identify terminology related to word processing.
2. Determine the meaning of word processing, its components, its diversity, and how it relates to the information processing cycle.
3. Discuss and demonstrate use of common word processing functions.
4. Create, spell check, use formatting options, and save documents.

Document Production Procedures

1. Demonstrate the proper use of the document production cycle.
2. Identify basic parts and formats of business documents.

3. Apply proofreading skills to create mailable business documents.
4. Demonstrate the ability to perform a mail merge.

Business Communications

Writing Techniques

1. Identify and use business English terminology.
2. Demonstrate correct usage of the parts of speech, subject-verb agreement, expression of numbers and abbreviations, and sentence construction.
3. Apply correct punctuation, capitalization, and spelling rules.
4. Compose well-written business letters and documents.

Telephone Techniques

1. Identify traditional telephone terminology.
2. Describe telephone equipment and systems.
3. Discuss special telephone features and services.
4. Demonstrate characteristics of good listening skills.
5. Apply good telephone pronunciation and articulation techniques.
6. Demonstrate positive techniques of handling incoming and placing outgoing telephone calls.

Transcription Techniques

1. Identify and discuss transcription media and equipment features.
2. Demonstrate efficient transcription techniques.
3. Demonstrate the ability to transcribe mailable business documents from dictated tapes.

Information Management Tools

Records Control

1. Define terminology used in records management.
2. Demonstrate proper filing procedures.
3. Discuss micrographics and how it is used in records management.
4. Identify steps in transfer of files.
5. Demonstrate the ability to control manual records.

Database

1. Define terminology related to database management.
2. Demonstrate proper procedures to create, enter, store, and retrieve information from a database.
3. Print reports and information from the database.
4. Demonstrate the ability to export information from the database software and import the data into a word processing document.

Spreadsheets

1. Define the terminology related to spreadsheets.
2. Discuss spreadsheet applications used in business.
3. Demonstrate concepts for processing alphanumeric data.
4. Apply software capabilities to solve problems using a pre-designed template.
5. Print reports and graphs.
6. Export data from the spreadsheet software and import the data into a word processing document.

Information Processing Tools

Telecommunications

1. Define terminology related to telecommunications and networks.
2. Identify equipment needed for telecommunications.
3. Discuss and apply procedures for communicating with electronic bulletin boards, on-line information services, electronic mail, voice mail, and facsimile transmissions.
4. Discuss equipment requirements for network configurations.

Desktop Publishing

1. Identify and use desktop publishing terminology.
2. Discuss components required for layout and design of desktop publishing products.
3. Demonstrate proper techniques for producing a publication using a thumbnail sketch, rough draft, and comprehensive layout.
4. Apply procedures for preparing text in word processing software and then importing the information into page layout software to insert appropriate graphics.

Closure

NONE

Content Outline

Section 1—Introduction to Business Information Processing

Unit 1—Introduction to the Course

Purpose of course

- Introduction to office education
- Objectives of the course
- Relationship of course to business

Course overview

- Classroom equipment
- Units of instruction
- Competencies
- Evaluation
- Classroom organization and management

Unit 2—Contemporary Office Systems

Office organization and responsibilities

- Organizational charts
- Data and information flows
- Large or small scale data flow

Information processing cycle

- Defining information processing

Computer hardware used in offices

- Types of computer systems
- Input devices
- Processing equipment
- Output devices
- Input and output devices
- Storage

Computer software used in offices

- Operating system
- Environments
- Programming languages
- Utilities
- Applications software

Changes in office technology

Technological advances

Unit 3—Social Implications

Computer use issues

Dependency
Nameless society
Technological developments
Computer virus epidemic

Legal and ethical issues

Data spying
Hackers
Employees or former employees
Piracy
Legal issues

Privacy issues

Credit bureaus
Data banks
Paperless offices
Security methods

Reliability of systems

Hardware
Software
Storage media
Knowledge
Integrity
Accuracy

Section 2—Word Processing

Unit 1—Word Processing Procedures

An overview of word processing

Defining word processing
Software categories
The next-generation word processing packages
Word processing tips

Word processing production features

Common word processing features
File functions
Formatting options

- Editing features
- Additional production features

Word processing a document

- Creating a document
- Spell checking a document
- Saving a document

Unit 2—Document Production Procedures

The document production cycle

- The cycle defined

Basic parts and formats of business documents

- Memorandums
- Business letters
- Business reports
- Columnar reports

Proofreading documents

- Importance of proofreading
- Proofreader's marks
- Proofreading techniques
- Types of common errors
- Helpful hints

Mail merge procedures

- Creating merge files
- Merging data into documents

Section 3—Business Communications

Unit 1—Writing Techniques

Business English

- Parts of speech
- Subject and verb agreement
- Sentence construction

Expression of numbers and abbreviations

- Numbers
- Abbreviations

Punctuation

- Commas
- Semicolons
- Underlines

Quotation marks
Apostrophes
Colons
Hyphens
Dash
Parentheses

Capitalization

Proper nouns
Names of the months
Trade names
Names of historic events, holidays, and eras
Titles of high government officials
Titles preceding a person's name
Academic degrees

Spelling

Noun plurals
Noun possessives
Suffixes
"ie" and "ei" combinations
Spelling hints

Types of letters

Letters of goodwill
Letters of request
Letters of positive response
Letters of negative response

Types of reports

Informal reports
Formal reports

Techniques for writing reports

Preparing to write
Outlining facts and ideas
Writing a report
Proofreading and editing

Unit 2—Telephone Techniques

Telephone equipment and systems

Key telephone systems
Types of key systems
Telephone networks
Types of special equipment

Special telephone features and services

- Special telephone features
- Types of telephone services

Listening skills

- Hearing and listening
- Good listening techniques

Telephone techniques

- Projecting a favorable telephone image
- Pronunciation and articulation techniques

Incoming and outgoing calls

- Handling incoming telephone calls
- Placing outgoing telephone calls

Unit 3—Transcription Techniques

Transcription equipment and features

- Discrete media equipment
- Features of equipment

Efficient transcription techniques and procedures

- Transcription skills
- Transcription procedures

Section 4—Information Management Tools

Unit 1—Records Control

Filing procedures

- Alphabetic filing
- Steps in alphabetic filing
- Misfiling

Micrographics

- Micrographics defined
- Types of microforms

Files transfer

- Types of files
- Policy of file transfer
- Transfer methods
- Steps to transfer files

Unit 2—Database

Designing/creating a database

Planning the organization of the database
Designing forms
Formatting fields

Data entry/output

Using a database
Output

Unit 3—Spreadsheets

Business applications

Accounting applications
Managerial applications

Procedures for processing alphanumeric data

Spreadsheet applications
Creating a worksheet
Default values
Cells
Formats

Using templates

Templates defined
Worksheet retrieval
Cursor/pointer movement
Data entry
Editing cell contents
What-if analysis
Error conditions
Spreadsheet operational procedures

Printing

Reports
Graphic reports

Section 5—Information Processing Tools

Unit 1—Telecommunications

Telecommunication equipment

System requirements
Data communication procedures

17

Communication services

Electronic bulletin board systems (BBS)
On-line information services
Electronic mail concepts (E-mail)
Voice messaging or voice mail
Facsimile (FAX)

Network concepts

Network configurations
Common components
Purpose of networking
Network set up and installation
Network advantages
Network disadvantages

Unit 2—Desktop Publishing

Desktop publishing overview

Primary goal

Desktop publishing components

Hardware
Software

Planning a design

Planning a design
Selecting the right document
Using balance and emphasis

Creating the page layout

Graphic elements
Steps in layout

Operational procedures

Software manuals
The desktop publishing process

Section 6—Closure

Unit 1—Closure of Business Information Processing

Review of course objectives by sections and units

Review of sections and units
Introduction to business information processing
Word processing
Business communications

  - Information management tools
  - Information processing tools
  - Closure

Analysis of student competencies

Course evaluation

Examination

Teacher Activities

Teacher Preparation

☐ Preview unit.

☐ Review unit objectives.

☐ Make instructional analysis.

☐ Assess student learning needs.

☐ Decide on lesson domain: cognitive, psychomotor, or affective.

☐ Select instructional materials based on instructional analysis and student learning needs.

☐ Select instructional strategies based on lesson content and student learning needs.

☐ Prepare lesson plans from the unit lesson.

☐ Prepare additional instructional material.

☐ Reserve necessary media and equipment.

Teacher Presentation

☐ Present student objectives.

☐ Establish rapport with students.

☐ Review lesson objectives with students.

☐ Relate lesson to prior or future learning.

☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.

☐ Emphasize the value/importance of the unit or activity.

☐ Allow time for closure of a lesson.

Reteach Activities

☐ Identify area(s) of weakness from results of evaluation.

☐ Select unit activities not previously used.

☐ Use additional resources and/or create materials based on student learning needs.

☐ Use a different teaching strategy in reteaching.

☐ Retest.

Equipment

SUGGESTED MINIMUM EQUIPMENT REQUIREMENTS

for a Quality Office Education program

Equipment and furniture

A computer or a terminal for each student (networked systems/standalone systems)

Macintosh/SE-hard drive 2-4 mg RAM and/or
MS-DOS 386 minimum, 2-4 MEG minimum storage and/or
PS2's 30, or above

- two disk drives, one 5 1/4" and one 3 1/2" on MS-DOS
- hard disk 80 MEG
- enhanced 101 keyboard with keypad
- high resolution monitor with graphics capability
- several expansion slots

A fully equipped teacher's computer station

Monitors

- Color
- High resolution at least EGA
- Swivel/tilt monitor bases

Printers (A combination of the following printers—using one printer to each two computers as a rule of thumb)

- A 24-pin dot matrix printer with near letter quality/high speed modes
- Letter quality printers
- Laser printers (preferably Postscript)

Other computer peripherals and equipment

- Modems
- Scanner
- Automatic switch boxes for switching access to each computer/terminal
- Mouse for each computer or terminal
- At least two modems and access to dedicated phone line
- Extra cables for attaching peripherals
- Electronic calculator, six to ten
- Transcribing machines, six to ten
- Copy machine
- Overhead projector with low heat/good cooling system
- LCD computer panel for data projection
- Pull-down movie screen
- File cabinets and storage cupboards
- Student work stations with adjustable height
- Adjustable chairs, preferably rolling

Supplies

Covers and keyboard covers
Diskettes for backups of each software programs for each computer
Computer paper, both laser and regular cut
Ribbons—standard black and colors
Toner for the laser printers and copy machine
Colored diskettes—each class uses a different color.
Computer maintenance kit—including screwdrivers of various sizes, cotton swabs, alcohol, screen wipes, mini vacuum, air vacuum

Competency Checklist

Business Information Processing

(4 = Mastery—1 = Non-Mastery)

COMPETENCIES

I. Introduction to Business Information Processing

1. Introduction to the Course

NONE

2. Contemporary Office Systems

4 3 2 1 1. Define terminology related to information processing in the contemporary office.
4 3 2 1 2. Describe the organization of the office environment and the responsibilities required.
4 3 2 1 3. Discuss the information processing cycle.
4 3 2 1 4. Discuss hardware used in business.
4 3 2 1 5. Describe software used in business.
4 3 2 1 6. Identify emerging technology that impacts business information processing by using current literature.

3. Social Implications

4 3 2 1 1. Define terminology related to computer crime, computer users, and new computer devices and techniques.
4 3 2 1 2. Identify major issues and technological developments related to computers and society.
4 3 2 1 3. Describe ethical and legal issues that have arisen as a result of the computer revolution.
4 3 2 1 4. Identify privacy issues involved with electronic data storage.
4 3 2 1 5. Explain reasons for concern about the reliability of computer systems.

II. Word Processing
1. Word Processing Procedures

4 3 2 1 1. Identify terminology related to word processing.
4 3 2 1 2. Determine the meaning of word processing, its components, its diversity, and how it relates to the information processing cycle.
4 3 2 1 3. Discuss and demonstrate use of common word processing functions.
4 3 2 1 4. Create, spell check, use formatting options, and save documents.

COMPETENCIES

2. Document Production Procedures

4 3 2 1 1. Demonstrate the proper use of the document production cycle.
4 3 2 1 2. Identify basic parts and formats of business documents.
4 3 2 1 3. Apply proofreading skills to create mailable business documents.
4 3 2 1 4. Demonstrate the ability to perform a mail merge.

III. Business Communications
1. Writing Techniques

4 3 2 1 1. Identify and use business English terminology.
4 3 2 1 2. Demonstrate correct usage of the parts of speech, subject-verb agreement, expression of numbers and abbreviations, and sentence construction.
4 3 2 1 3. Apply correct punctuation, capitalization, and spelling rules.
4 3 2 1 4. Compose well-written business letters and documents.

2. Telephone Techniques

4 3 2 1 1. Identify traditional telephone terminology.
4 3 2 1 2. Describe telephone equipment and systems.
4 3 2 1 3. Discuss special telephone features and services.
4 3 2 1 4. Demonstrate characteristics of good listening skills.
4 3 2 1 5. Apply good telephone pronunciation and articulation techniques.
4 3 2 1 6. Demonstrate positive techniques of handling incoming and placing outgoing telephone calls.

3. Transcription Techniques

4 3 2 1 1. Identify and discuss transcription media and equipment features.
4 3 2 1 2. Demonstrate efficient transcription techniques.
4 3 2 1 3. Demonstrate the ability to transcribe mailable business documents from dictated tapes.

COMPETENCIES

IV. Information Management Tools

1. Records Management

4 3 2 1 1. Define terminology used in records management.
4 3 2 1 2. Demonstrate proper filing procedures.
4 3 2 1 3. Discuss micrographics and how it is used in records management.
4 3 2 1 4. Identify steps in transfer of files.
4 3 2 1 5. Demonstrate the ability to control manual records.

2. Database Management

4 3 2 1 1. Define terminology related to database management.
4 3 2 1 2. Demonstrate proper procedures to create, enter, store, and retrieve information from a database.
4 3 2 1 3. Print reports and information from the database.
4 3 2 1 4. Demonstrate the ability to export information from the database software and import the data into a word processing document.

3. Spreadsheets

4 3 2 1 1. Define the terminology related to spreadsheets.
4 3 2 1 2. Discuss spreadsheet applications used in business.
4 3 2 1 3. Demonstrate concepts for processing alphanumeric data.
4 3 2 1 4. Apply software capabilities to solve problems using a pre-designed template.
4 3 2 1 5. Print reports and graphs.
4 3 2 1 6. Export data from the spreadsheet software and import the data into a word processing document.

COMPETENCIES

V. Information Processing Tools

1. Telecommunications

4 3 2 1 1. Define terminology related to telecommunications and networks.
4 3 2 1 2. Identify equipment needed for telecommunications.
4 3 2 1 3. Discuss and apply procedures for communicating with electronic bulletin boards, on-line information services, electronic mail, voice mail, and facsimile transmissions.
4 3 2 1 4. Discuss equipment requirements for network configurations.

2. Desktop Publishing

4 3 2 1 1. Identify and use desktop publishing terminology.
4 3 2 1 2. Discuss components required for layout and design of desktop publishing products.
4 3 2 1 3. Demonstrate proper techniques for producing a publication using a thumbnail sketch, rough draft, and comprehensive layout.
4 3 2 1 4. Apply procedures for preparing text in word processing software and then importing the information into page layout software to insert appropriate graphics.

VI. Closure

NONE

Special Product Descriptions

Business Information Processing

Test Builder and Test Bank

The following products were designed specifically for the business information processing course and are available from the Educational Development & Training Center, 1 (800) 356-EDTC.

■ The Test Builder Program

Format	Catalog No.
MS-DOS 3½	BOI-3203-TBP
MS-DOS 5¼	BOI-3205-TBP
MAC 3½	BOM-3202-TBP

The *Test Builder Program* helps a teacher construct, administer, grade tests and print the results. The time for test preparation and grading is reduced because the input of questions is simplified and the test is graded by the computer.

The computerized test consists of true/false, multiple choice, or matching questions. When the questions are displayed on the screen, they appear in random order; therefore, they will not appear in the same order on any two computers. This reduces the opportunity for students to cheat. After the student answers all of the questions, the program grades the test and records the grade on the student's data disk. A compilation of the student's name, grade, and questions missed can be copied to the teacher's data disk for storage, analysis, and printing. The number of the question that was incorrectly answered can be checked on the competency matrix to determine if the student has mastered the competency.

All question formats can be modified or deleted; however, only existing true/false and multiple choice test bank files can be used to create a new test bank. A hardcopy of the test, answer key, and an answer sheet can be printed for all tests.

■ Business Information Processing Test Bank

The *Business Information Processing Test Bank* will be available in the fall of 1992. The test bank is used in conjunction with the *Test Builder Program*. The questions are keyed to competencies and essential elements included in the teacher's guide. However, questions can be modified to fit your teaching style and your students' needs. You can modify the questions by following the instructions provided in the *Test Builder Program Instructions*.

Office Education Simulations

Simulations and student materials are available for all cluster courses and occupationally specific courses. Each simulation places the students in a specific position in a company. Student materials are available to help decrease time and cost of reproducing the material.

- **Business Information Processing Simulations—BO-300-SIM**
  Carol's Cosmetic Cottage—word processing
  B & C Enterprises—spreadsheets
  Texas Country's Best Videos—desktop publishing
  Agriculture Technologies Inc.—telecommunications
  Ski On The Edge—records management

- **Microcomputer Applications Simulations—BO-301-SIM**
  Kandy's Kandlesticks—word processing
  High Tech Video Corporation—database
  Happy Hammer Home Builders—spreadsheet
  Office Greenery, Inc.—integration, DTP, telecommunications

- **Business Computer Applications Simulations—BO-302-SIM**
  Psychedelic Wheels—word processing
  Entertainment Sensations—database
  Video Masters—spreadsheets/desktop publishing
  Home Computing Network—computer information/telecommunications

- **Business Office Clerical/Business Office Services Simulations—BO-326-SIM**
  "Hits" Unlimited—only one company is used throughout this simulation so there will be a continuity for special students. The students will complete work in the following areas: word processing/proofreading, file/data entry, desktop publishing, calculating machines, and written communication

- **Office Administrative Systems Simulations—BO-306-SIM**
  Yo-Rap Messages—keyboarding, proofreading, and editing
  Don't Disc Me—information control management
  Forever Friends Pet Store—electronic calculator
  Parties Unlimited—reprographics
  Lone Star Travel—oral/written communication
  Car Dial—communication skills

- **Office Support Systems Simulations—BO-307-SIM**
  Essex Corporation—word processing
  Smiles, Inc. Modeling Agency—communication skills
  V & S Mini Lock Manufacturing Co.—communication skills
  LYKE Radio Station—electronic calculator/financial management
  Modern Mall Insurance Co.—information control and management

If your school is using only one of the office education courses why not mix and match simulations from the other courses? Provide your students with a variety of short activities that meet the essential elements and bring them into the "real world"! You can adjust the difficulty level of each simulation by the equipment and software used or by providing additional activities.

Office Education Simulations by Skills Area

- **Computer Information/Telecommunications**

Home Computing Network	BCAI
Agriculture Technologies Inc.	BIP
Office Greenery, Inc.	MAP

- **Information Control and Management**

Don't Disc Me	OAS
Entertainment Sensations	BCAI
High Tech Video Corporation	MAP
"Hits"—filing/data entry	BOC/S
Modern Mall Insurance Co.	OSS
Ski On The Edge	BIP

- **Keyboarding/Word Processing/Proofreading & Editing**

Yo-Rap Messages	OAS
Essex Corporation	OSS
Kandy's Kandlesticks	BCAI
Psychedelic Wheels	MAP
Carol's Cosmetic Cottage	BIP
"Hits"—word processing	BOC/S

- **Electronic Calculator/Financial Management**

Forever Friends Pet Store	OAS
"Hits"—calculating machine	BOC/S
LYKE Radio Station	OSS

- **Desktop Publishing/Reprographics**

Video Masters	BCAI
Texas Country's Best Video	BIP
"Hits"—desktop publishing	BOC/S
Parties Unlimited	OAS
Office Greenery, Inc.	MAP

- **Communications**

V&S Mini Lock Manufacturing	OSS
Smiles Inc. Modeling Agency	OSS
Lone Star Travel	OAS
Car Dial	OAS
"Hits"—communications	BOC/S

- **Spreadsheet**

Video Masters	BCAI
B & C Enterprises	BIP
Happy Hammer Home Builders	MAP

Common Essential Elements

The business information processing occupationally specific course also includes the common essential elements which must be taught in addition to the essential elements for the course. A unit of instruction has been developed around each topic area. The units are composed of flexible modules which can be easily used when the class is in transition. This allows the common competencies to be addressed without diluting the curriculum. Feel free to make the common element units more specific to business information processing as needed.

Leadership	BO-310-CE1
Successful Employment	BO-310-CE2
Entrepreneurship	BO-310-CE3
Safety	BO-310-CE4
Human Relations	BO-310-CE5
Personal and Business management	BO-310-CE6

All six units together:BO-310-TG

Additional Support Material

The following products are recommended as additional support material for use in the classroom. Most products are neither course nor program specific.

- **Office Education Quality Guide**—BO-315-TG—Contains rules and regulations for establishing and maintaining office education courses.

- **Integrating Academic Principles into Microcomputer Applications**—BO-402-LP—Microcomputer applications lesson plan modules correlate the four academic areas: language arts, mathematics, science, and social studies. Each references both academic and office education essential elements. Also included is a matrix referencing the information with TAAS objectives.

- **Building Math Skills With Spreadsheets**—JS-500-TG—Workbook designed to improve students' math skills through spreadsheet activities. Activities address operations and problem-solving, both areas tested by TAAS. Lessons are designed for use with all spreadsheet software.

- **Building Reading and Writing Skills Through Word Processing**—JS-501-TG—Workbook designed to enhance reading and writing skills while mastering word processing skills. An instructor can cover course essential elements and build reading and writing skills at the same time. Each unit is set up as a lesson plan with a stated objective and instructor/student instructions. Materials can be used on any computer with any word processing software. The exercises address topics such as self-esteem, interpersonal skills, and how to be successful on the job.

- **Conquer the TAAS**—LM-100-SM—Self-paced, self-diagnostic student guide will help students become acquainted with the TAAS test. Written to match the test's format, it covers all the objectives of reading and writing sub-tests. A patterned answer sheet signals and targets a specific problem for the student such as spelling, punctuation, sentence fragments or combining, and usage.

- **Data Drill**—Computerized exercises and drills build a student's keyboard and numeric keypad skills. The program is designed to check speed and accuracy, display incorrect entries, and calculate grades.

  MS-DOS 3½—JSI-3003-CS
  MS-DOS 5¼—JSI-3005-CS

- **Karl's 101 HandyHandouts**—KD-100-HH—Collection of over 220 pages of cleverly designed handouts, exercises, activities, and complete how-to lesson plans can be used to increase student motivation and involvement in the learning process. Each handout is reproducible and can be made into unique and eye-catching overhead transparencies to add pizazz to your lesson. It comes in a 3-ring binder.

- **Mower Store**—This computer software package is designed to provide practical application of spreadsheet skills, students work in groups to set up and operate a lawn and garden equipment business. *Mower Store* simulates six months of store operations and will take two to three weeks of class time.

  MS-DOS 3½—JSI-2003-CS
  MS-DOS 5¼—JSI-2005-CS
  APPLE 3½—JSA-2003-CS
  APPLE 5¼—JSA-2005-CS
  MAC 3½—JSM-2003-CS

- **Stop and Think Cards**—Famous quotes from some of the country's most well-known individuals to encourage the development of students' higher-level thinking skills. Great motivators. Printed on 8½" by 11" colored cards.

  Stop and Think Cards—GEN-100-STC
  Stop and Think Cards II—GEN-101-STC
  Stop and Think III—GEN-102-STC

COMPLIANCE STATEMENT

TITLE VI, CIVIL RIGHTS ACT OF 1964; THE MODIFIED COURT ORDER, CIVIL ACTION 5281, FEDERAL DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TYLER DIVISION

Reviews of local education agencies pertaining to compliance with Title VI Civil Rights Act of 1964 and with specific requirements of the Modified Court Order, Civil Action No. 5281, Federal District Court, Eastern District of Texas, Tyler Division are conducted periodically by staff representatives of the Texas Education Agency. These reviews cover at least the following policies and practices:

(1) acceptance policies on student transfers from other school districts;

(2) operation of school bus routes or runs on a non-segregated basis;

(3) nondiscrimination in extracurricular activities and the use of school facilities;

(4) nondiscriminatory practices in the hiring, assigning, promoting, paying, demoting, reassigning, or dismissing of faculty and staff members who work with children;

(5) enrollment and assignment of students without discrimination on the basis of race, color, or national origin;

(6) nondiscriminatory practices relating to the use of a student's first language; and

(7) evidence of published procedures for hearing complaints and grievances.

In addition to conducting reviews, the Texas Education Agency staff representatives check complaints of discrimination made by a citizen or citizens residing in a school district where it is alleged discriminatory practices have occurred or are occurring.

Where a violation of Title VI of the Civil Rights Act is found, the findings are reported to the Officer for Civil Rights, Department of Health, Education and Welfare.

If there is a direct violation of the Court Order in Civil Action No. 5281 that cannot be cleared through negotiations, the sanctions required by the Court Order are applied.

TITLE VII, CIVIL RIGHTS ACT OF 1964; EXECUTIVE ORDERS 11246 AND 11375; TITLE IX, 1973 EDUCATION AMENDMENTS; REHABILITATION ACT OF 1973 AS AMENDED; 1974 AMENDMENTS TO THE WAGE-HOUR LAW EXPANDING THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967; AND VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1972 AS AMENDED IN 1974.

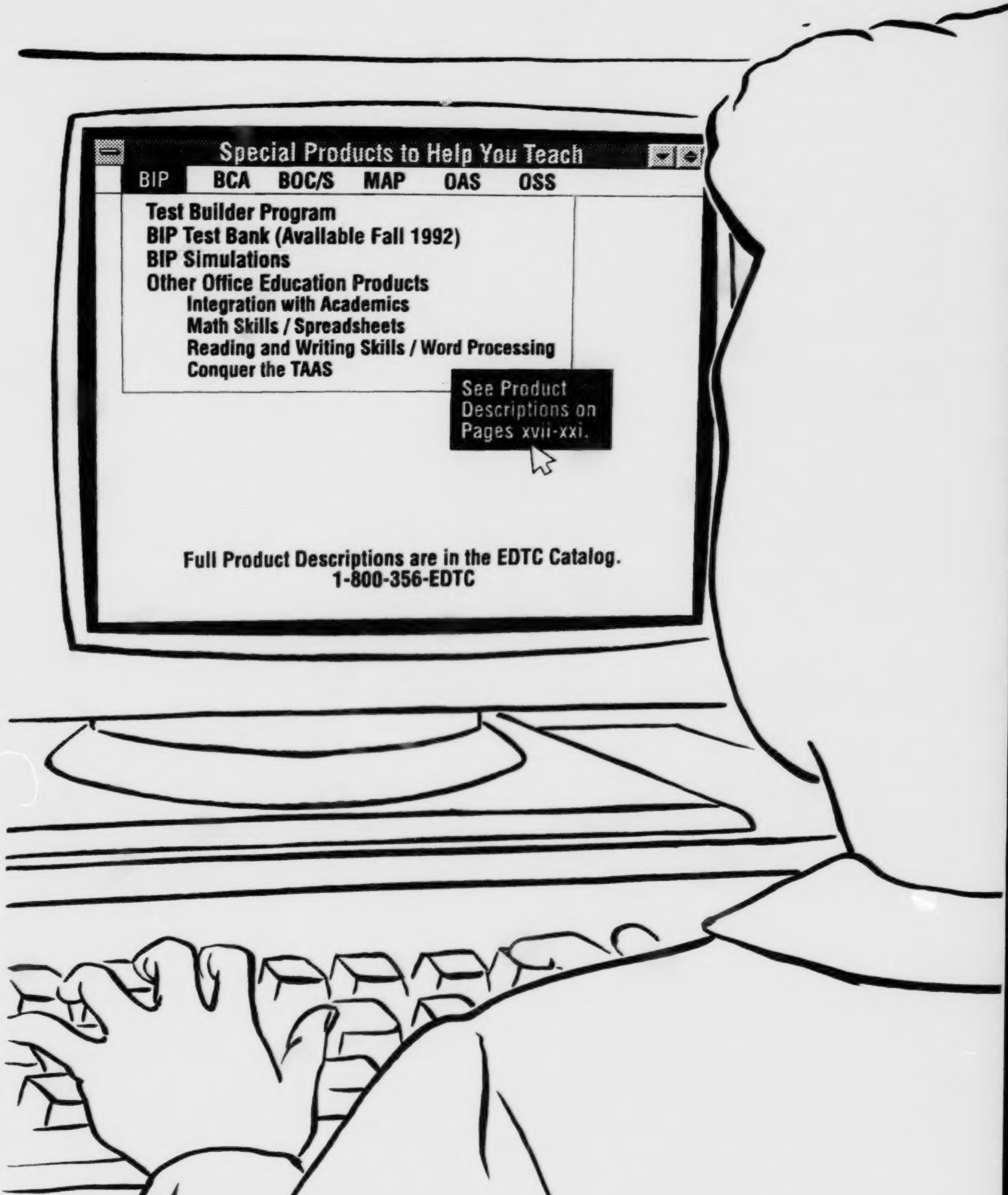
It is the policy of the Texas Education Agency to comply fully with the nondiscrimination provisions of all federal and state laws and regulations by assuring that no person shall be excluded from consideration for recruitment, selection, appointment, training, promotion, retention, or any other personnel action, or be denied any benefits or participation in any programs or activities which it operates on the grounds of race, religion, color, national origin, sex, handicap, age, or veteran status (except where age, sex, or handicap constitute a bona fide occupational qualification necessary to proper and efficient administration). The Texas Education Agency makes positive efforts to employ and advance in employment all protected groups.

BUSINESS INFORMATION PROCESSING

Te[illegible]e

BO-3005TG

BEST COPY AVAILABLE


Special Products to Help You Teach
BIP
BCA
BOC/S
MAP
OAS
OSS

Test Builder Program
BIP Test Bank (Available Fall 1992)
BIP Simulations
Other Office Education Products
  Integration with Academics
  Math Skills / Spreadsheets
  Reading and Writing Skills / Word Processing
  Conquer the TAAS

See Product Descriptions on Pages xvii-xxi.

Full Product Descriptions are in the EDTC Catalog.
1-800-356-EDTC

Business Information Processing

Teacher's Guide

Revised Edition
Prepared by

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Published by
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East Texas State University
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in cooperation with
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1992

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East Texas State University

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To ensure education equity, this material has been reviewed to eliminate bias or stereotyping.

Educational Development & Training Center
East Texas State University • Commerce, TX 75429
1-800-356-EDTC

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Dorothy Baum, Office Education Program Specialist
David Childs, Office Education Program Specialist

Revised Edition

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Lynne Morris, Proofreader
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Linda Baron, Word Processing Specialist

First Edition

Special thanks to Carol Sullivan who originally prepared *Business Information Processing Curriculum Guide*.

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Preface

The curriculum for business information processing was prepared to provide quality instructional materials for instructors of business information processing courses in Texas. This guide serves as a basis for achieving the office education essential elements mandated by the Texas Education Agency.

This teacher's guide has been developed through a joint effort of the Texas Education Agency and the Educational Development and Training Center located on the campus of East Texas State University in Commerce, Texas.

The purpose of developing this guide is to provide office education instructors with a teacher's guide that includes detailed units of instruction correlated directly to the essential elements. Suggestions and comments concerning this teacher's guide are requested and should be sent to the Curriculum Coordinator at the Educational Development and Training Center, ET Station, Commerce, TX 75429.

Organization of the Teacher's Guide

Each instructional unit in the office education *Business Information Processing* teacher's guide is correlated to the office education essential elements mandated by the Texas Education Agency. The basic components of the guide are the section pages which are considered the teacher's guide, the unit pages which are considered the student's guide, and the appendices which are collections of useful, pertinent information.

Section Pages

Each section is considered the teacher's guide for the units covered in that section. The section pages help the instructor plan and prepare for each unit. Each section has the following components.

- ☐ **Essential Elements**—covered in the section are identified by number.
- ☐ **Suggested Unit Lesson Plan**—designed to serve as guides for the preparation of daily and weekly lesson plans and as a basic curriculum outline.
  - ▲ **Objective Page**—lists section and unit titles, essential elements, suggested number of classroom hours, unit objectives, student competencies, focus, learning domains, and basic skills statements.
  - ▲ **Content Outline**—a broad overview designed to give the major emphasis of the unit.
  - ▲ **Suggested Teacher Activities**—reminders of the four basic areas teachers need to address in every unit. The first three are general preparations and are the same in all units. The fourth one varies with each unit.
    - **Teacher Preparation** activities are concerned with lesson analysis and general material preparation.
    - **Teacher Presentation** activities are concerned with methods for optimum classroom learning.
    - **Reteach Activities** review steps in formative evaluation.
    - **Specific Teaching Activities** assist the teacher in specific materials preparation for that unit. Suggestions for bulletin boards, equipment, guest speakers, and field trips are made and special instructions for activities and tests are given.

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- **Activity/Competency Test Matrices for Domains and Basic Skills**—the student activities and tests in these units were designed with the cognitive, psychomotor, and affective domains in mind. Purposeful attention was also given to using and reinforcing reading, writing, and mathematics skills. Two matrices are provided to help the instructor quickly see where clear correlations exist.

- **Competency Tests**—can help the instructor make a judgment about student progress toward predetermined standards. The standards in this program reflect those established by the business community for entry-level employees.

  Competency tests are provided for each unit. These tests measure the students' understanding of the information covered in the unit overview and are queued to the essential elements. Test items can be used in a formative way as pretest measures, reviews, or for oral quizzes. The instructor should construct additional test items for any objectives and information added to the unit. It is important that students understand the criteria that are used to evaluate their competency in a given area. Other information on student evaluation is included in Appendix G—*Lesson Plan Development.*

  The evaluation instruments in this teacher's guide can be used in various ways. For example:

  - **Individualized Instruction**—after reading the unit overview and/or taking notes from the instructor, the student completes the activities. After successfully completing the activities, the student takes the competency test. If the test results show a weakness in a specific portion of the unit, the student should review that portion of the unit overview, complete reteach activities provided by the instructor, and retake that portion of the test.

  - **Group Instruction**—after participating in classroom discussion and completing the student activities, the students should be able to demonstrate mastery of items listed in the competencies. The competency test can be used to measure students' progress toward meeting these competencies.

  - **Remedial and Reteach Instuction**—students who demonstrate a poor understanding of the subject matter need remedial help. Selected reteach activities are provided in the Suggested Teacher Activities in the Suggested Unit Lesson Plan.

- **Answers to Activities and Competency Tests**—answers are provided for most activities and competency tests in the unit. Because of diversified programs, equipment, teaching styles, and student backgrounds, some activities and test questions are best evaluated to the satisfaction of the instructor. Where appropriate, suggestions for such evaluation are given.

Unit Pages

The unit pages can be used in a variety of ways, such as a primary resource guide for the beginning instructor; a teacher information base to be supplemented with additional textbook information, periodical supplements, and other background experiences; or on an information base for students that will be reinforced with additional material and lectures. Unit pages are made up of the following components.

- ☐ **Objectives/Competencies**—the first page of each unit states the goals of the unit to provide a sense of direction and accomplishment for both the student and the instructor. Two types of objectives are provided:
  - ▲ Unit objectives state what the student is expected to achieve by completion of the unit.
  - ▲ Student competencies state what the student is expected to do to master the unit objectives.

  Each unit of instruction uses the "golden thread" approach. Identifed student competencies are addressed in the unit overview, activities, competency test, and competency checklist. For example, the first competency listed is developed through activity one and evaluated through the first part of the competency test.

  The lists of competencies provide direction for the learning process. The instructor might want to discuss the objectives with the students prior to covering the information in the unit to provide a common understanding of the intent of the objectives.

  The essential elements describe minimum competencies. Instructors should modify competencies developed through these materials to the needs of their own students and programs. When competencies are added, corresponding information, activities, and evaluation procedures should be designed.

- ☐ **Focus**—tells "Why" or the purpose for the unit to be studied.

- ☐ **Terminology**—computer courses have their own characteristic idiom and technical vocabulary. A terminology list with definitions is provided for most units.

- ☐ **Unit Overview**—the unit overview specifically addresses the essential elements. It condenses current information to meet the cognitive (knowledge) objectives of the unit. The instructor will find that the unit overview can serve as an excellent guide when presenting background information. Information may be presented in several ways.
  - ▲ The instructor may use the unit overview as a guide for presenting the background knowledge necessary for students to complete the specific competencies and, ultimately, the unit objective; or

▲ Students may be allowed to use the unit overview as a basic text. It provides a common information base to which students can add research findings or lecture notes.

☐ **Activities**—the learning activities are keyed directly to the student competencies. They are designed to provide a direction to study; promote growth in the cognitive, psychomotor, and/or affective domains; and accommodate the learning styles of students. An effort has been made to incorporate the following elements of the learning process: translation, interpretation, application, analysis, synthesis, and evaluation.

The activity sheets can be completed in class or used as homework assignments. The instructor should preview the activities prior to making student assignments to assure that information has been taught, and that all required supplies and equipment are available. Specific Teacher Activities are presented in the Suggested Unit Lesson Plan. Class time should be set aside for those activities that require group participation and other small group work projects. Answers to the activities are included in the section pages for the individual unit.

Appendices

☐ **Appendix A**

Resources—provides names and addresses for publishers, software vendors, microcomputer directories, electronic information services, magazines/periodicals/newsletters, services and reports, professional organizations, professional publications, and other business publications.

☐ **Appendix B**

Course Competency Checklist—provides the instructor with a competency checklist for the entire course to include levels of student achievement. It may be used as a competency profile.

☐ **Appendix C**

Suggested Equipment List—provides a suggested list of equipment and supplies recommended for the course.

☐ **Appendix D**

2+2+2 Articulation Project—provides information on the 2+2+2 program and gives a DACUM chart which illustrates the responsibilities of a beginning information processing specialist.

☐ **Appendix E**

Course Descriptions—provides a description of each of the office education courses.

☐ **Appendix F**

Office Education Essential Elements—lists all the office education essential elements.

☐ **Appendix G**

Lesson Plan Development—provides the instructor with a suggested format for developing lessons, a copy of Bloom's Taxonomy, and suggested verbs to use with each level.

☐ **Appendix H**

Special Needs—suggests ways of modifying the office education curriculum for handicapped students.

Special Product Descriptions

Test Builder and Test Bank

The following products were designed specifically for the business information processing course and are available from the Educational Development & Training Center, 1 (800) 356-EDTC.

■ The Test Builder Program

Format Catalog No.
MS-DOS 3½—BOI-3203-TBP
MS-DOS 5¼—BOI-3205-TBP
MAC 3½—BOM-3202-TBP

The *Test Builder Program* helps a teacher construct, administer, grade tests and print the results. The time for test preparation and grading is reduced because the input of questions is simplified and the test is graded by the computer.

The computerized test consists of true/false, multiple choice, or matching questions. When the questions are displayed on the screen, they appear in random order; therefore, they will not appear in the same order on any two computers. This reduces the opportunity for students to cheat. After the student answers all of the questions, the program grades the test and records the grade on the student's data disk. A compilation of the student's name, grade, and questions missed can be copied to the teacher's data disk for storage, analysis, and printing. The number of the question that was incorrectly answered can be checked on the competency matrix to determine if the student has mastered the competency.

All question formats can be modified or deleted; however, only existing true/false and multiple choice test bank files can be used to create a new test bank. A hardcopy of the test, answer key, and an answer sheet can be printed for all tests.

■ Business Information Processing Test Bank

The *Business Information Processing Test Bank* will be available in the fall of 1992. The test bank is used in conjunction with the *Test Builder Program*. The questions are keyed to competencies and essential elements included in the teacher's guide. However, questions can be modified to fit your teaching style and your students' needs. You can modify the questions by following the instructions provided in the *Test Builder Program Instructions*.

Office Education Simulations

Simulations and student materials are available for all cluster courses and occupationally specific courses. Each simulation places the students in a specific position in a company. Student materials are available to help decrease time and cost of reproducing the material.

- **Business Information Processing Simulations—BO-300-SIM**
    - *Carol's Cosmetic Cottage*—word processing
    - *B & C Enterprises*—spreadsheets
    - *Texas Country's Best Videos*—desktop publishing
    - *Agriculture Technologies Inc.*—telecommunications
    - *Ski On The Edge*—records management

- **Microcomputer Applications Simulations—BO-301-SIM**
    - *Kandy's Kandlesticks*—word processing
    - *High Tech Video Corporation*—database
    - *Happy Hammer Home Builders*—spreadsheet
    - *Office Greenery, Inc.*—integration, DTP, telecommunications

- **Business Computer Applications Simulations—BO-302-SIM**
    - *Psychedelic Wheels*—word processing
    - *Entertainment Sensations*—database
    - *Video Masters*—spreadsheets/desktop publishing
    - *Home Computing Network*—computer information/telecommunications

- **Business Office Clerical/Business Office Services Simulations—BO-326-SIM**
    - "Hits" Unlimited—only one company is used throughout this simulation so there will be a continuity for special students. The students will complete work in the following areas: word processing/proofreading, file/data entry, desktop publishing, calculating machines, and written communication

- **Office Administrative Systems Simulations—BO-306-SIM**
    - *Yo-Rap Messages*—keyboarding, proofreading, and editing
    - *Don't Disc Me*—information control management
    - *Forever Friends Pet Store*—electronic calculator
    - *Parties Unlimited*—reprographics
    - *Lone Star Travel*—oral/written communication
    - *Car Dial*—communication skills

- **Office Support Systems Simulations—BO-307-SIM**
    - *Essex Corporation*—word processing
    - *Smiles, Inc. Modeling Agency*—communication skills
    - *V & S Mini Lock Manufacturing Co.*—communication skills
    - *LYKE Radio Station*—electronic calculator/financial management
    - *Modern Mall Insurance Co.*—information control and management

If your school is using only one of the office education courses why not mix and match simulations from the other courses? Provide your students with a variety of short activities that meet the essential elements and bring them into the "real world"! You can adjust the difficulty level of each simulation by the equipment and software used or by providing additional activities.

Office Education Simulations by Skills Area

- **Computer Information/ Telecommunications**

Home Computing Network	BCAI
Agriculture Technologies Inc.	BIP
Office Greenery, Inc.	MAP

- **Information Control and Management**

Don't Disc Me	OAS
Entertainment Sensations	BCAI
High Tech Video Corporation	MAP
"Hits"—filing/data entry	BOC/S
Modern Mall Insurance Co.	OSS
Ski On The Edge	BIP

- **Keyboarding/Word Processing/ Proofreading & Editing**

Yo-Rap Messages	OAS
Essex Corporation	OSS
Kandy's Kandlesticks	BCAI
Psychedelic Wheels	MAP
Carol's Cosmetic Cottage	BIP
"Hits"—word processing	BOC/S

- **Electronic Calculator/ Financial Management**

Forever Friends Pet Store	OAS
"Hits"—calculating machine	BOC/S
LYKE Radio Station	OSS

- **Desktop Publishing/ Reprographics**

Video Masters	BCAI
Texas Country's Best Video	BIP
"Hits"—desktop publishing	BOC/S
Parties Unlimited	OAS
Office Greenery, Inc.	MAP

- **Communications**

V&S Mini Lock Manufacturing	OSS
Smiles Inc. Modeling Agency	OSS
Lone Star Travel	OAS
Car Dial	OAS
"Hits"—communications	BOC/S

- **Spreadsheet**

Video Masters	BCAI
B & C Enterprises	BIP
Happy Hammer Home Builders	MAP

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Successful Employment	BO-310-CE2
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Safety	BO-310-CE4
Human Relations	BO-310-CE5
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All six units together:	BO-310-TG

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- **Building Math Skills With Spreadsheets**—JS-500-TG—Workbook designed to improve students' math skills through spreadsheet activities. Activities address operations and problem-solving, both areas tested by TAAS. Lessons are designed for use with all spreadsheet software.

- **Building Reading and Writing Skills Through Word Processing**—JS-501-TG—Workbook designed to enhance reading and writing skills while mastering word processing skills. An instructor can cover course essential elements and build reading and writing skills at the same time. Each unit is set up as a lesson plan with a stated objective and instructor/student instructions. Materials can be used on any computer with any word processing software. The exercises address topics such as self-esteem, interpersonal skills, and how to be successful on the job.

- **Conquer the TAAS**—LM-100-SM—Self-paced, self-diagnostic student guide will help students become acquainted with the TAAS test. Written to match the test's format, it covers all the objectives of reading and writing sub-tests. A patterned answer sheet signals and targets a specific problem for the student such as spelling, punctuation, sentence fragments or combining, and usage.

- **Data Drill**—Computerized exercises and drills build a student's keyboard and numeric keypad skills. The program is designed to check speed and accuracy, display incorrect entries, and calculate grades.
  MS-DOS 3½—JSI-3003-CS
  MS-DOS 5¼—JSI-3005-CS

- **Karl's 101 HandyHandouts**—KD-100-HH—Collection of over 220 pages of cleverly designed handouts, exercises, activities, and complete how-to lesson plans can be used to increase student motivation and involvement in the learning process. Each handout is reproducible and can be made into unique and eye-catching overhead transparencies to add pizazz to your lesson. It comes in a 3-ring binder.

- **Mower Store**—This computer software package is designed to provide practical application of spreadsheet skills, students work in groups to set up and operate a lawn and garden equipment business. *Mower Store* simulates six months of store operations and will take two to three weeks of class time.

  MS-DOS 3½—JSI-2003-CS
  MS-DOS 5¼—JSI-2005-CS
  APPLE 3½—JSA-2003-CS
  APPLE 5¼—JSA-2005-CS
  MAC 3½—JSM-2003-CS

- **Stop and Think Cards**—Famous quotes from some of the country's most well-known individuals to encourage the development of students' higher-level thinking skills. Great motivators. Printed on 8½" by 11" colored cards.

  ***Stop and Think Cards*—GEN-100-STC**
  ***Stop and Think Cards II*—GEN-101-STC**
  ***Stop and Think III*—GEN-102-STC**

Changes Made to Essential Elements State Board Approval Pending

Business Information Processing I (1, 2, or 3 units) shall include the following essential elements:

(1) *Concepts and skills related to effective communication and production of business documents. The student shall be provided opportunities to:*

   (A) *demonstrate proficiency in business English, spelling, and proofreading;*

   (B) *Identify and apply correct format for business correspondence and documents and mail merge;*

   (C) *demonstrate word processing procedures to steps in document production;*

   (D) *demonstrate proficiency in transcription; and*

   (E) *use proper techniques in business telephone usage.*

(2) *Concepts and skills related to business information management. The student shall be provided opportunities to:*

   (A) *identify procedures for controlling manual records by applying terminology and procedures for indexing, coding, and filing alphabetically;*

   (B) *demonstrate procedures for automated management of business records, including use of database management software for storage, retrieval, manipulation, selection, and reporting of records; and*

   (C) *identify business applications of electronic spreadsheets and demonstrate fundamental concepts and operational procedures related to their use.*

(3) *Concepts and skills related to management of information flow out of, into, and within an office. The student shall be provided opportunities to:*

   (A) *demonstrate computer-aided preparation and distribution of personalized correspondence, using electronic mail;*

   (B) *identify tools for preparing information for mass distribution and demonstrate desktop publishing and presentation graphic techniques;*

   (C) *Apply the concepts of using communication systems both for accessing and using on-line information services, for transmission of outgoing information, and utilization of electronic bulletin boards; and*

   (D) *demonstrate transportation of electronic images.*

(4)

(4) Identify characteristics of contemporary office systems related to information processing and management. The student shall be given opportunities to:

- *(A) identify and/or observe office activity related to information processing and information management;*
- *(B) identify responsibilities and procedures involved in business information processing with individuals working in the field;*
- *(C) read and discuss current literature related to business information processing; and*
- *(D) identify emerging information processing tools and understand their impact on business information processing.*

(5) Concepts and skills associated with the social implications of computers. The student shall be provided opportunities to:

- *(A) examine issues concerning responsible use of computer systems;*
- *(B) understand the social ramifications of computer applications related to privacy, values, and reliability of systems.*

Note: These variations were made with the approval of the State Director of Office Education in order to meet the computer requirements of some colleges and universities in the State.

Suggested Scope and Sequence

Business Information Processing

SECTION/UNIT		TITLE	WEEKS	HRS.
I.		**Introduction to Business Information Processing**		
	1	Introduction to the Course	.5	3
	2	Contemporary Office Systems	2	10
	3	Social Implications	2	10
II.		**Word Processing**		
	1	Word Processing Procedures	2	10
	2	Document Production Procedures	2	10
III.		**Business Communications**		
	1	Writing Techniques	2	10
	2	Telephone Techniques	2	10
	3	Transcription Techniques	2	10
IV.		**Information Management Tools**		
	1	Records Management	2	10
	2	Database Management	2	10
	3	Spreadsheets	2	10
V.		**Information Processing Tools**		
	1	Telecommunication	2	10
	2	Desktop Publishing	3	15
VI.		**Closure**		
	1	Closure for Business Information Processing	.5	2
		Total Weeks/Hours Allocated	**26**	**130**

Ten weeks have been set aside to cover the common essential elements, review, makeup work, and testing.

SECTION 1
Business Information Processing

This introduction to *Business Information Processing* is an overview of the purpose, objectives, and course content which includes classroom organization, management, and safety.

Essential Elements 75.87(c)(4)(5)

4. **Identify characteristics of contemporary office systems related to information processing and management. The student shall be given opportunities to:**

   A. identify and/or observe office activity related to information processing and information management;

   B. identify responsibilities and procedures involved in business information processing with individuals working in the field;

   C. read and discuss current literature related to business information processing; and

   D. identify emerging information processing tools and understand their impact on business information processing.

5. **Concepts and skills associated with the social implications of computers. The student shall be provided opportunities to:**

   A. examine issues concerning responsible use of computer systems;

   B. understand the social ramifications of computer applications related to privacy, values, and reliability of systems.

Introduction 1-1

Lesson Plan

Essential Elements: None
Allocated Time: 3 Hours

Unit Objective: Students will develop an understanding of the purpose, contents, and organization of the course microcomputer applications.

Student Competencies: After completing this unit, the student will be able to:

1. Relate the purpose of business information processing to office education, business, and industry.
2. Recognize the role of the youth organization relative to business information processing.
3. Discuss course objectives, equipment, units, competencies, and evaluation measures.
4. Explain classroom organization and management.

Focus: Knowing the overview of a course will allow you to become acquainted with the required material. In a business setting, having an overview allows you to see the overall picture and then you can create your goals to achieve the final outcome.

1-1 Introduction

Content Outline

Purpose of course

- Introduction to office education
- Objectives of the course
- Relationship of course to business

Course overview

- Classroom equipment
- Units of instruction
- Competencies
- Evaluation
- Classroom organization and management

Introduction 1-1

Teacher Activities

Teacher Preparation

- ☐ Preview unit.
- ☐ Review unit objectives.
- ☐ Make instructional analysis.
- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or affective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Suggestions

This introduction is beneficial to both you and the students. It provides you with the opportunity to present any policies, procedures, expectations, and other relative information which enhance classroom instruction and operations. It also establishes a working environment for the students and presents an overview for the work expected during the class.

Feel free to add other subject matter and instructional materials relative to your teaching assignment. Because the purpose of this section is to introduce the course, student activities and evaluation measures are limited. Some of the teaching activities can be used to develop student activities. Determine a method for assessing student learning.

☐ Design a bulletin board showing the relationship of business information processing to office education. A suggestion might be: "Under the Umbrella of Office Education." List cluster courses and specific courses, highlighting business information processing.

☐ Ask questions at the beginning of the course, such as:

- Why are you taking this course?
- What does the title "Business Information Processing" mean to you?
- What do you think the course content covers?
- What is vocational education?
- What is office education?

☐ Show and discuss the transparency "Benefits of Office Education."

☐ Show and discuss the transparency "Learning through Business Information Processing."

☐ Ask students to write their perceived likes and dislikes of office occupations. Invite someone who works in an office or related field to respond. Inform the speaker in advance of the nature of the assignment. Secure a person with speaking abilities who projects a positive work image.

☐ Post data on job market projections. Update periodically with projections from different sources.

☐ Invite a former office education student to discuss Business Professionals of America. Be sure to inform the speaker in advance what topics you want covered in the presentation. You may want to include a question-and-answer period.

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☐ Review youth conferences with students. Competitive event guidelines could be distributed and discussed.

☐ Develop an orientation presentation on the equipment in the classroom.

☐ Develop, disseminate, and discuss handouts covering classroom policies and procedures. Let students make suggestions for other policies.

☐ Handout the terminology page. Review the list with the students. Ask that they add to the list any terms which they do not understand. Periodically review the lists with the students.

☐ Invite an office worker to speak to the class on the importance of job competency.

☐ Show a film relative to one of the topics: work world, fire precautions, or others.

Business Professionals of America

Official Tagline

"Today's students, tomorrow's business professionals"
Used in all printed materials in conjunction with the name.

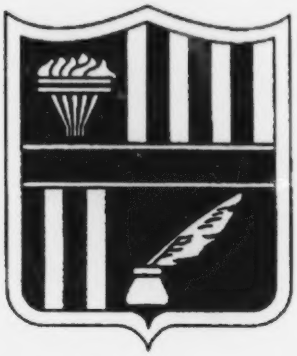
Colors

Navy blue, tan and red

Pledge

We are met in a spirit of friendship and goodwill as we prepare for productive lives in business and office careers. We work together to develop professionalism and leadership through Business Professionals of America and pledge our loyalty to our nation.

Emblem



The four points of the Business Professionals of America emblem stand for Ambition, Leadership, Sociability and Poise. The shield itself stands for the honor and dignity of the office profession. The quill and inkwell represent the stability of the office through the ages. The stripes represent direction; the torch signifies the ambition of the members as they strive to achieve goals to bring recognition to themselves and to our national organization.

Goals of Business Professionals of America

Develop student leadership. By participating, planning, serving as officers, conducting meetings, and cooperating with fellow students, coordinators, and teachers, students can develop their leadership qualities.

Improve poise, sociability, attitude, and tact. Members of this organization improve their social graces by taking an active role in the office, classroom, and social activities. Many of the students enrolled in these programs have not previously had the opportunity to participate in an organization. Business Professionals of America gives them the opportunity to acquire a sense of belonging for the first time.

Develop vocational competencies in business occupations. Vocational competence means being qualified to enter the world of work with a job skill and a certain amount of confidence in one's ability to perform that job. Students in Business Professionals of America are expected to be able to perform at least one job competently and effectively. Of course, their training is more comprehensive than this.

Promote better understanding at local, state, and national levels. Student participation and fellowship at all levels promotes better programs and provides knowledge of the programs and activities that are being carried out elsewhere.

Promote student ambition for useful purposes. Students learn the value of their own personal ambition and derive satisfaction from helping others.

Learn to plan effectively. Everyone needs to know where he/she is and where he/she is going. Planning is essential to all successful activities.

Develop an enthusiasm for learning and for remaining knowledgeable. In these days, graduating high school seniors can expect to change their major occupation three times. Therefore, enthusiasm for learning is absolutely essential. Students are made aware of our changing society and are taught the necessity of constantly updating their knowledge.

Develop confidence and a spirit of competition. People are competing during their entire lifetimes. Competitive events create excitement and stimulate and facilitate learning and advancement.

Learn to get along with others. Even though an individual may have skill and ability, he/she cannot get a job and keep it if unable to get along with fellow workers.

Develop loyalty through esprit de corps. Everyone needs pride in his or her organization if the organization is to be successful and of benefit to society.

Understand and promote business. Our "quiet" president, Calvin Coolidge, remarked, "The business of America is business." Our American capitalistic economy makes possible one of the highest standards of living in the world. Business Professionals of America students are proud to be part of this great business world and to be able to promote it.

Benefits
of
Office Education

Why developing academic and vocational skills is important to you. Skills help you...

☐ Get a job

☐ Keep a job

☐ Advance your education

TM-1

Build social and leadership skills while participating in

BUSINESS *professionals* **OF AMERICA**

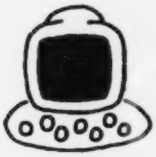
☐ Attend youth conferences

☐ Enter competitive events

☐ Run for an office

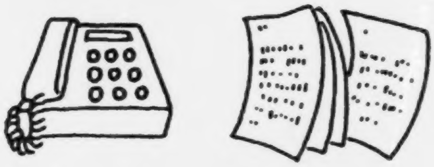
☐ Participate in local chapter activities

Learning through Business Information Processing



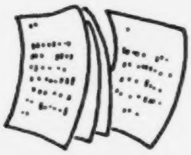
Intro to Microcomputers

- ▲ Intro to the Course
- ▲ Contemporary Office Systems
- ▲ Social Implications



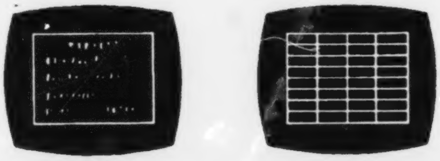
Business Communications

- ▲ Writing Techniques
- ▲ Telephone Techniques
- ▲ Transcription Techniques



Word Processing

- ▲ Word Processing Procedures
- ▲ Document Production Procedures



Information Management Tools

- ▲ Records Management
- ▲ Database Management
- ▲ Spreadsheets

Information Processing Tools

- ▲ Telecommunications
- ▲ Desktop Publishing

Contemporary Office Systems 1-2

Lesson Plan

Essential Elements: 75.87 (c)(4)
Allocated Time: 10 Hours

Unit Objective: Students will gain an understanding of new technology and the organization of the contemporary office, including information processing terminology, hardware, software, and procedures.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology related to information processing in the contemporary office.
2. Describe the organization of the office environment and the responsibilities required.
3. Discuss the information processing cycle.
4. Discuss hardware used in business.
5. Describe software used in business.
6. Identify emerging technology that impacts business information processing by using current literature.

Focus: Information processing is a vital part of every office. Knowing the organization's overall structure enables you to access and send information to the appropriate person in a timely manner. Having knowledge about information processing hardware, software, and procedures gives you the opportunity to perform tasks quickly and efficiently.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or effective domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

1-2 Contemporary Office Systems

Content Outline

Office organization and responsibilities

Organizational charts
Data and information flows
Large or small scale data flow

Information processing cycle

Defining information processing

Computer hardware used in offices

Types of computer systems
Input devices
Processing equipment
Output devices
Input and output devices
Storage

Computer software used in offices

Operating system
Environments
Programming languages
Utilities
Applications software

Changes in office technology

Technological advances

Teacher Activities

Teacher Preparation

- ☐ Preview the unit.
- ☐ Review unit objectives.
- ☐ Make instructional analysis.
- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or effective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Suggestions

- ☐ Prepare transparency of the organizational chart.
- ☐ Secure several examples of organizational charts.
- ☐ Provide magazines, catalogs, etc. for the students to use in preparing their portfolios.
- ☐ Prepare a bulletin board with pictures of computer hardware and software.
- ☐ Allow time for the students to do research in the library. Arrange with the librarian to have specific materials assembled for the students to use.
- ☐ Remember to use the *Test Builder Program* and the related test bank.

Activities 4-5

Students must create and maintain a portfolio in these activities. The portfolio should be a collection of pictures, articles, descriptions, catalog information, etc. The students can use notebooks, folders, or any other method to keep their information in an orderly collection. Prepare guidelines and/or instructions for the students to follow.

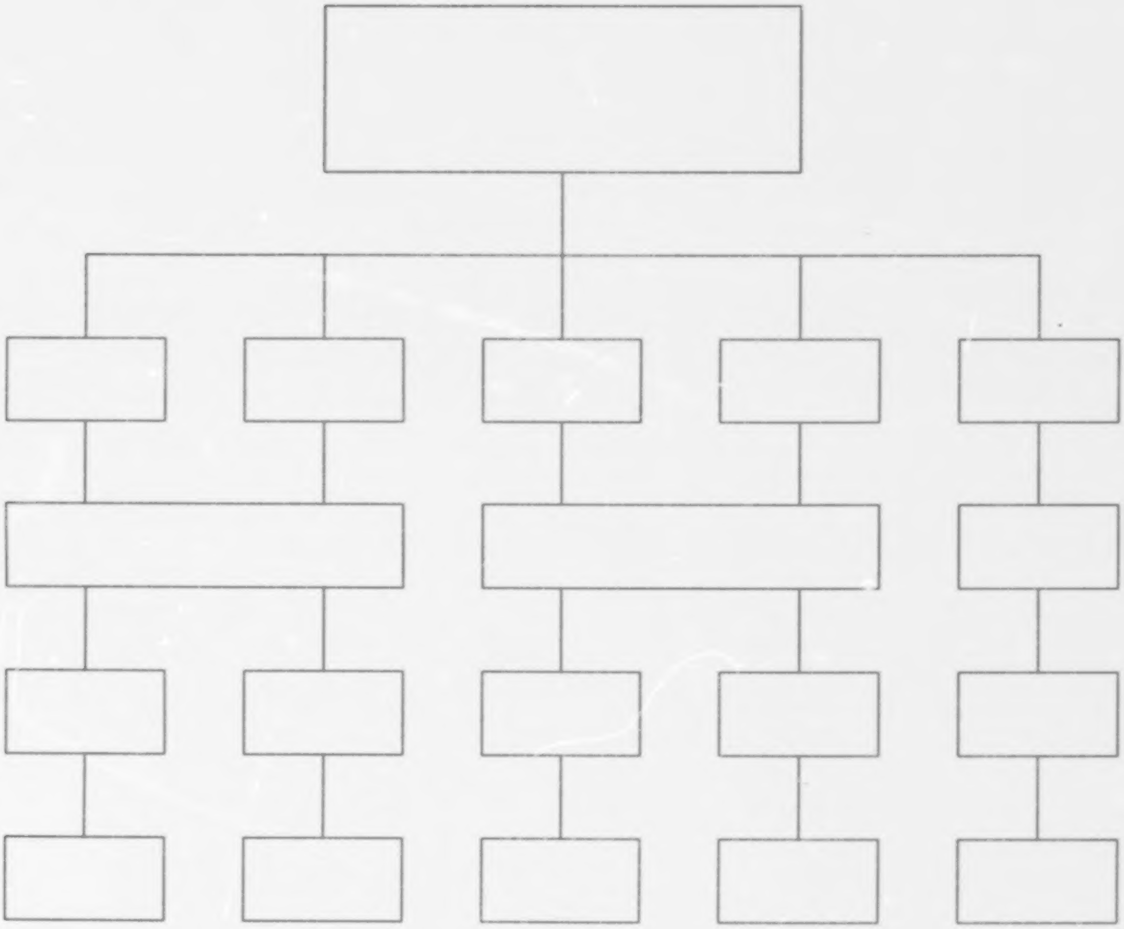
Activity 6

This activity can be prepared by partners or small groups of three or four. Have students give a presentation to the class.

Competency Test

The test is designed to cover all the competencies in this unit. You may modify the instructions to fit the needs of your students. Prepare any additional instructions or guidelines that you wish the students to follow.

Organizational Chart



ACTIVITY MATRIX

Activities	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1	X			X	X	
2	X			X	X	
3	X			X	X	
4 & 5	X			X	X	
6	X			X	X	
	X			X	X	
	X				X	

COMPETENCY TEST MATRIX

Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
	X	X		X	X	

Competency Test

Using the information below, create a realistic fictional company. Name the company and determine the organizational chart. From each persons responsibilities, decide upon hardware and software, demonstrate how the information cycle relates to your organization, and list emerging technology that should be considered for purchase for your company and why. Follow any additional instructions or guideline provided by your instructor.

Your company is a small information processing firm. Your employees include:

(your name), President

Sally Friedman, Accounting Department Supervisor

Robert Hernadez, Database Supervisor

Ling Trang, Word Processing Supervisor

Maria Sanchez, Telecommunications Operator

Leanne George, Office Manager

Latise Lewis, Accounting Clerk

Walter Reyes, Payroll Clerk

Sylvia Turner, Data Entry Clerk

Herman Wilson, Word Processing Specialist

Kassandra Roberts, Desktop Publishing Specialist

Activity Answers

Activity 1

```
          F I B E R O P T I C S   M H Z
  B     B                   O     S
  I N P U T D E V I C E S   A     D
  T     S           A       X     O   S
          F   F L O P P Y D I S K S   U
  R O M   I         A       A     S   P
  A       L   M     C       L   B Y T E
  M A G N E T I C D I S K   C     S   R
              C     T       A     T   C
  H A R D W A R E   A       B     E   O
              O     N       L     M   M
        C L O C K   C P U   E     S   P
              O     E     F           U
              M           O   I N P U T
M I N I C O M P U T E R   N           E
B             U           T           R
    O P E R A T I N G S Y S T E M
              E
S E C O N D A R Y M E M O R Y
```

Activity 2 Evaluated to the satisfaction of the instructor.

Activity 3 Evaluated to the satisfaction of the instructor.

Activities 4-5

Evaluated to the satisfaction of the instructor. The following are a few guidelines that can be followed when evaluating the portfolios.

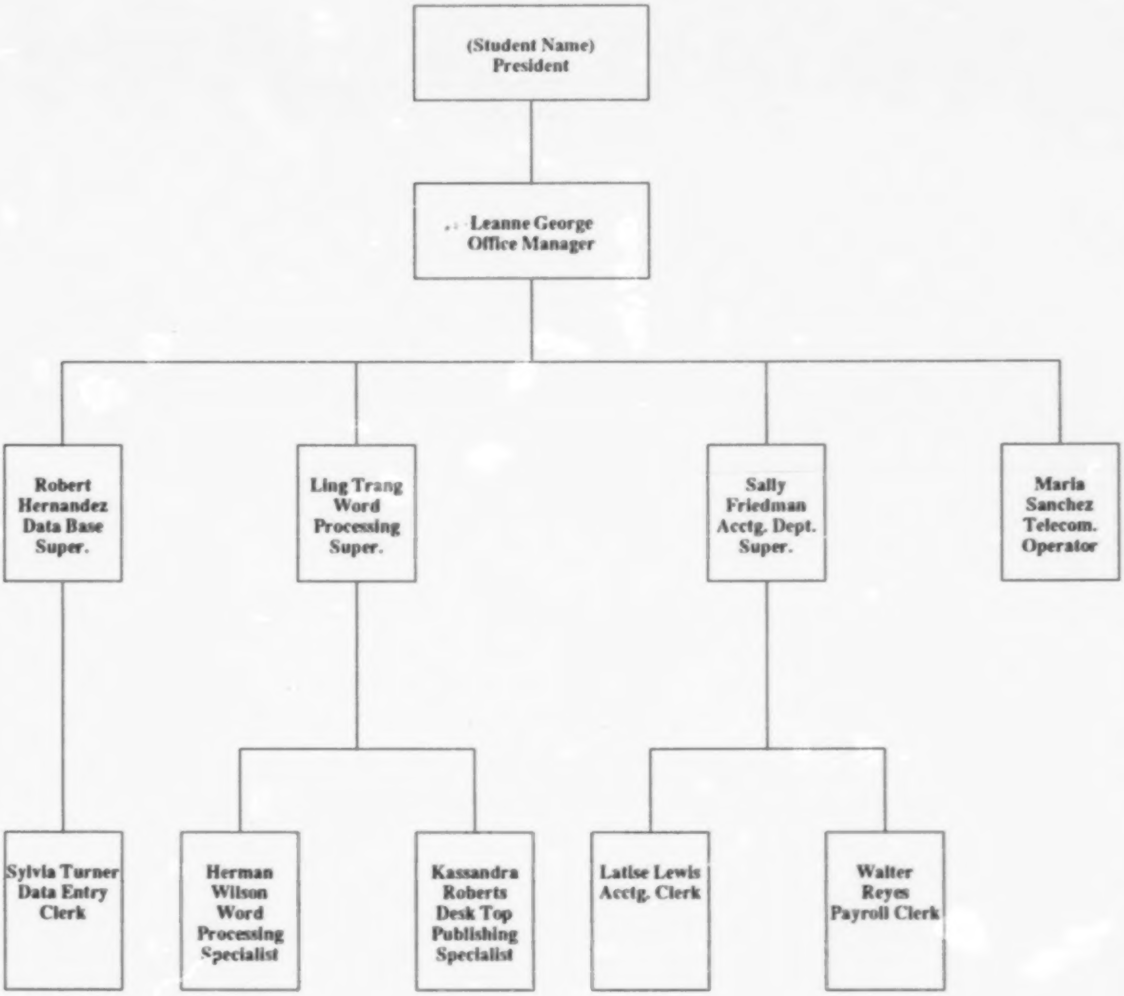
- Creativity and originality.
- Information comes from several sources and not just one.
- Thorough, containing a wide variety of information.
- Neat and organized.

Activity 6 Evaluated to the satisfaction of the instructor.

Competency Test Answers

Evaluated to the satisfaction of the instructor. The following are guidelines that can be followed but not limited to.

The organizational chart should be similarly arranged as follows:


(Student Name) President
Leanne George Office Manager
Robert Hernandez Data Base Super.
Ling Trang Word Processing Super.
Sally Friedman Acctg. Dept. Super.
Maria Sanchez Telecom. Operator
Sylvia Turner Data Entry Clerk
Herman Wilson Word Processing Specialist
Kassandra Roberts Desk Top Publishing Specialist
Latise Lewis Acctg. Clerk
Walter Reyes Payroll Clerk

Lesson Plan

Essential Element: 75.87 (c)(5)
Allocated Time: 10 Hours

Unit Objective: Students will describe issues related to the responsible use of computer systems, discuss social ramifications of computer usage, and identify responsible practices in the use of computers.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology related to computer crime, computer users, and new computer devices and techniques.
2. Identify major issues and technological developments related to computers and society.
3. Describe ethical and legal issues that have arisen as a result of the computer revolution.
4. Identify privacy issues involved with electronic data storage.
5. Explain reasons for concern about the reliability of computer systems.

Focus: The responsibility that goes with using a computer is like the responsibility of driving an automobile. If the user is irresponsible, careless, or malicious, the effects of his/her decisions and actions can be damaging and far-reaching.

Domains: Activities and competency tests provide learning experiences within the affective, cognitive, and psychomotor domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and mathematics and are coded on the Activity and Competency Test Matrices.

1-3 Social Implications

Content Outline

Computer use issues

- Dependency
- Nameless society
- Technological developments
- Computer virus epidemic

Legal and ethical issues

- Data spying
- Hackers
- Employees or former employees
- Piracy
- Legal issues

Privacy issues

- Credit bureaus
- Data banks
- Paperless offices
- Security methods

Reliability of systems

- Hardware
- Software
- Storage media
- Knowledge
- Integrity
- Accuracy

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Teacher Activities

Teacher Preparation

☐ Preview the unit.
☐ Review unit objectives.
☐ Make instructional analysis.
☐ Assess student learning needs.
☐ Decide on lesson domain: cognitive, psychomotor, or affective.
☐ Select instructional materials based on instructional analysis and student learning needs.
☐ Select instructional strategies based on lesson content and student learning needs.
☐ Prepare lesson plans from the unit lesson.
☐ Prepare additional instructional material.
☐ Reserve necessary media and equipment.

Teacher Presentation

☐ Present student objectives.
☐ Establish rapport with students.
☐ Review lesson objectives with students.
☐ Relate lesson to prior or future learning.
☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
☐ Emphasize the value/importance of the unit or activity.
☐ Allow time for closure of a lesson.

Reteach Activities

☐ Identify area(s) of weakness from results of evaluation.
☐ Select unit activities not previously used.
☐ Use additional resources and/or create materials based on student learning needs.
☐ Use a different teaching strategy in reteaching.
☐ Retest.

Specific Teaching Activities

Because information on computer crime and computer ethics has become more available, you may wish to have an open discussion before presenting the unit. This will help you determine how much the students already know about the material.

☐ Obtain a copy of the movie *War Games* or another computer-related movie to show in your classroom. The movie *War Games* shows the dangers of "hacking." Discuss with the students the ramifications of computer hacking.

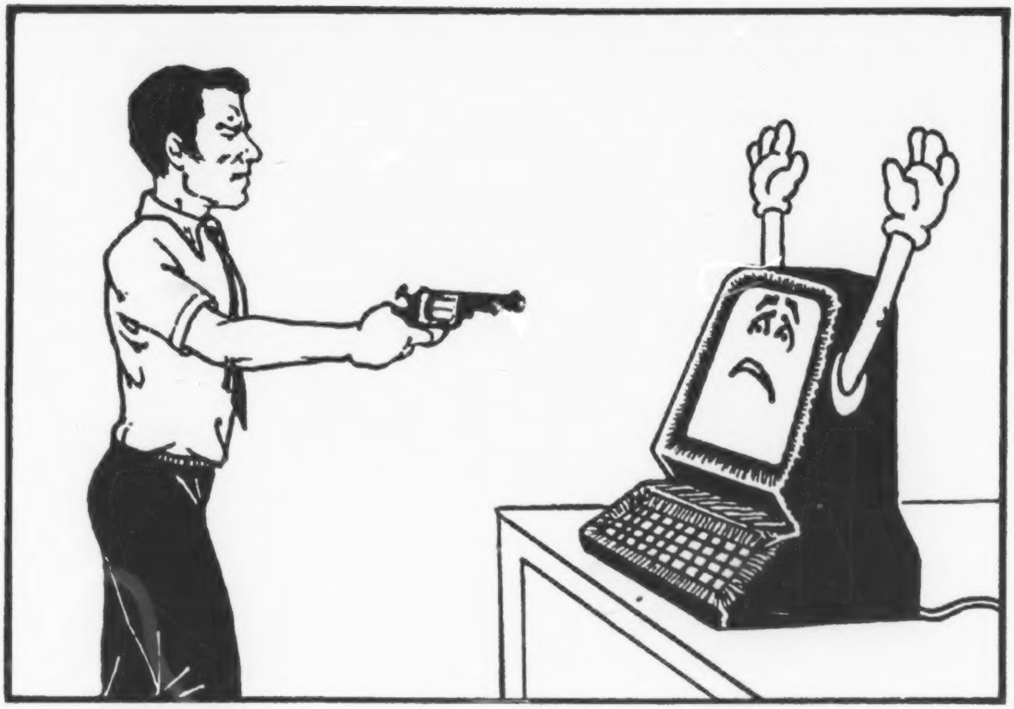
☐ The laws that are used in Activity 3, Project 2, were difficult to locate. You may wish to have a guest speaker provide an overview of the laws concerning computer crime and related topics. If you are unable to do this, you can obtain a photocopy of the laws or a copy of the *Texas Penal Code* from your local police department. Other laws can be found in history books, publications from the U.S. Government, and periodicals.

☐ Prepare a bulletin board that relates to this unit. Ask the students to bring in articles they find in newspapers or periodicals about responsible use of computers and ramifications of the topic. You might award extra points to students who participate in this activity.

☐ Plan a visit to the school library to search for information about computers and privacy or legal issues.

Computer Crime

- ☐ White-collar crime
- ☐ Large amounts of money
- ☐ Theft of technology
- ☐ Few criminals caught; fewer prosecuted



Provisions of the Privacy Act (1974)

Requires justification
for creation of or access to
data banks

Requires that government agencies
and private industry
allow individuals access
to information about themselves

Activity Matrix

Activities		Domains			Basic Skills		
		Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1		X			X	X	
2	Project 1	X				X	
	Project 2	X				X	
	Project 3	X				X	
3	Project 1	X			X	X	
	Project 2	X			X	X	
	Project 3	X				X	
4		X			X	X	
5		X				X	

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1-3 Social Implications

Competency Test Matrix

Parts		Domains			Basic Skills		
		Cognitive	Psycho-motor	Affective	Reading	Writing	Math
I		X			X	X	
II	Project 1	X			X	X	
	Project 2	X			X	X	
III	Project 1	X				X	
	Project 2	X				X	
IV		X				X	
V		X				X	

Social Implications 1-3

Competency Test

PART I: TERMINOLOGY

Fill in the blank with the correct term.

____________________ 1. A program that mimics the decision-making logic of human experts.

____________________ 2. A field of study involving techniques under which computers can formulate responses on the basis of content of accumulated and experience-related information.

____________________ 3. Any illegal act for which knowledge of computer technology is used to commit the offense.

____________________ 4. The unauthorized copying of a computer program.

____________________ 5. The science that deals with robots, their construction, capabilities, and applications.

____________________ 6. A term describing data that has been translated into a secret code for security reasons.

____________________ 7. The final phase of the virus life cycle.

____________________ 8. A form of illegal access to data.

____________________ 9. An information-producing system aimed at a particular decision a manager must make.

____________________ 10. Compact disks for computers, similar to read-only memory.

____________________ 11. Program that watches for typical things viruses do, halts them, and then warns the computer operator.

____________________ 12. A way in which the "spirit" of the law is applied to computer-related activities.

____________________ 13. The process of self-isolation within the current host program and attachment of the isolated segment to a new host.

____________________ 14. A virus that checks for a certain action, such as if an infected program has been executed a given number of times.

____________________ 15. A virus that leaves no external signs of its presence after infection.

____________________ 16. The process a virus uses to identify and distinguish itself from its host system.

____________________ 17. A term that implies that all paper documents have been replaced by electronic media and devices.

____________________ 18. The invasion of a virus into a host system.

____________________ 19. A computer enthusiast who is challenged by the practice of breaking computer security measures.

____________________ 20. A training aid consisting of a response pad and an interconnection box.

Competency Test

PART II: GENERAL ISSUES

Project 1

Answer the following questions.

1. How does computer dependency and the nameless society affect you?

2. How is each of the following used?

   1) Artificial intelligence:

   2) Robotics:

   3) AFIS:

   4) MDT:

   5) CD-ROM:

   6) Hypergraphics:

Project 2

Fill in the blank with the correct term.

____________________ 1. An unauthorized segment of machine-language code that replaces software or data with a copy of itself.

____________________ 2. A virus that checks for a certain action.

____________________ 3. A virus that was created to spread a greeting of world peace.

____________________ 4. A programmer's placement of unauthorized instructions in a computer operating system for future use in gaining unauthorized access to restricted information.

____________________ 5. Replaces the original boot sector with itself; causes loss of data.

____________________ 6. A virus that breaks down the directory section, making it impossible for a disk's contents to be read.

____________________ 7. Infects any application; causes loss of data due to system crashes.

____________________ 8. A segment of code that allows data to be transmitted to the legitimate operator while other data are transferred to an illegal operator.

____________________ 9. Programs that use network connections to spread from system to system.

____________________ 10. Replaces original boot sector with itself; spreads quickly to all bootable disks.

____________________ 11. A virus that checks for a specific date or time.

____________________ 12. Infects any .COM or .EXE program.

____________________ 13. Appears in many different varieties.

____________________ 14. Infects COMMAND.COM file.

PART III: LEGAL AND ETHICAL ISSUES

Project 1

Answer each of the following questions.

1. In your own words, define computer crime and explain why this type of crime is difficult to prosecute.

2. Name three types of computer crime and discuss what you think should be done to stop them.

   1)

   2)

   3)

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Project 2

Explain in a short paragraph one of the laws concerned with computers.

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PART IV: PRIVACY ISSUES

List in order of importance items which you think could improve privacy for credit bureaus, data banks, and paperless offices.

1-3 Social Implications

Competency Test

PART V: RELIABILITY OF SYSTEMS

Answer the following questions.

1. List three types of computer hardware.

   1)

   2)

   3)

2. What is the best protection against software failure?

3. Name four types of storage media.

   1)

   2)

   3)

   4)

4. How can accuracy of data be improved?

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Activity Answers

Activity 1

```
    D          CDROM
    S  E    T   A  D
PAKISTANIBRAIN  T  T
       C    M   A H
COMPUTERCRIME   C A
       Y    B PIRACY
    T  P    O A I K
    R  T L  M P M E
   VACCINE  B E E R
    P  O H    R
  HIDDEN ISRAELI
    O    G O  E
  SCORES H B  S
    R      O  S
E          T  O
T          I  F
HYPERGRAPHICS F
I          S AI
C             C
S   EXPERTSYSTEM
```

Activity 2

Projects 1-2 Evaluated to the satisfaction of the instructor.

Project 3 Answers may vary.

Artificial Intelligence:	A field of study involving techniques under which computers can formulate responses on the basis of content of accumulated and experience-related information. This technology can be used in decision support systems and expert systems.
Robotics:	The science that deals with robots, their construction, capabilities, and applications. This technology can be applied to carriers for inter-office mail or aides for the handicapped.
CD-ROM:	Compact disks for computers. Similar to read-only memory, they cannot be erased or recorded on. They can be used for archival storage.

AFIS:	Automated Fingerprint Identification System. Scans a database for criminals' fingerprints. This technology can be used by law enforcement agencies. An expert system can be used with the AFIS to match similar prints when practically invisible prints are found at the scene of a crime.
MDT:	Mobile Digital Terminals. Located inside patrol cars, they allow quicker response time to calls than routine voice communication. They provide direct computer access to information, such as names and license plates.
Hypergraphics:	Technology used in teaching or training that allows the students, the teacher, and the computer to interact through the use of a response pad and an interconnection box.

Activity 3

Projects 1-3 Evaluated to the satisfaction of the instructor.

Activity 4

Evaluated to the satisfaction of the instructor.

Activity 5

Answers may vary.

1. 1) Microcomputers
   2) Minicomputers
   3) Mainframes
   4) Keyboards
   5) Monitors
   6) Printers

2. Backup copies and taking care of the disks.

3. 1) Magnetic tape
   2) Diskettes
   3) Hard disks

4. Evaluated to the satisfaction of the instructor.

Competency Test Answers

Part I

1. Expert systems
2. Artificial intelligence (AI)
3. Computer crime
4. Piracy
5. Robotics
6. Encryption
7. Activation
8. Data spying
9. Decision support system
10. CD-ROM
11. Vaccine
12. Computer ethics
13. Replication
14. Logic Bomb
15. Hidden virus
16. Isolation
17. Paperless office
18. Infection
19. Hacker
20. Hypergraphics

Part II

Project 1 Evaluated to the satisfaction of the instructor.

Project 2

1. Computer virus
2. Logic Bomb
3. Peace virus
4. Trojan Horse
5. Alameda virus
6. Datacrime
7. Scores virus
8. Trap Door
9. Network worms
10. Pakistani Brain virus
11. Time Bomb
12. Israeli virus
13. nVIR
14. Lehigh virus

Part III

Projects 1-2 Evaluated to the satisfaction of the instructor.

Part IV

Evaluated to the satisfaction of the instructor.

Part V Answers may vary.

1. 1) Monitors
   2) Keyboards
   3) Printers
2. Make backup copies and protect the disks.
3. 1) Magnetic tape
   2) Diskettes
   3) Hard disks
   4) Disk packs
4. Evaluated to the satisfaction of the instructor.

SECTION 1

Business Information Processing

Unit 1: Introduction to the Course

Unit Objective: Students will develop an understanding of the purpose, content, and organization of the course Business Information Processing.

Student Competencies: After completing this unit, the student will be able to:

1. Relate the purpose of business information processing to office education, business, and industry.
2. Recognize the role of the youth organization relative to microcomputer applications.
3. Discuss course objectives, equipment, units, competencies, and evaluation measures.
4. Explain classroom organization and management.

Focus: Knowing the overview of a course will allow you to become acquainted with the required material. In a business setting, having an overview allows you to see the overall picture and then you can create your goals to achieve the final outcome.

1-1 Introduction

Terminology

Business Information Processing	An occupationally specific course that provides hands-on entry-level skills in utilizing computer information technology.
Business Professionals of America	A youth organization designed to provide opportunities for growth and development of business, office, and leadership skills.
Classroom organization and management	Policies and procedures for general classroom operations that enhance the learning environment.
Cluster course	A foundation course that includes concepts and skills needed in office occupations.
Competency	The ability to do something.
Competency checklist	A listing of competencies indicating mastery or nonmastery of each.
Evaluation measures	Methods for evaluating student performance.
Occupational specific course	A course that develops skills needed to perform a specific occupation.
Office education	One of the program areas that provides for vocational education in office-related occupations.
Units of instruction	Identification of specific topics to be taught during a course.

Unit Overview

Purpose of course

Business information processing is one of the occupationally specific courses under the umbrella of office education, which is one of several vocational-technical program areas that combine education and job training. It has been developed using the essential elements required by the State Board of Education.

This course provides fundamental computer concepts and skills needed by all workers in an office setting. It is composed of instructional activities that will be helpful in getting a job or in providing the foundation needed for advanced computer-related courses. The business information processing course is considered a stepping-stone into the business world.

Job market projections indicate the demand for workers with computer skills will continue because:

- ☐ Regardless of the type of business, people will be needed to handle the computer operations of the company.
- ☐ Chances for advancement are good for the worker who has computer-related skills.

The main goal of this course is to provide the student with:

- ☐ Marketable skills.
- ☐ Knowledge.
- ☐ Attitudes that will be useful upon graduation.

In addition to this primary goal, this course will provide experiences that will help the student:

- ☐ Make the transition from high school to the world of work.
- ☐ Develop leadership skills.
- ☐ Make career choices.

Students enrolled in business information processing have an opportunity to participate in youth organization activities at the local, state, and national levels through Business Professionals of America. It is the **only** approved student organization for students enrolled in office education courses.

This component of the course covers:

- ☐ A history of Business Professionals of America.
- ☐ A description of competitive events during which students interact with students from other schools and learn qualities of good sportsmanship.

Leadership skills are developed through:

- ☐ Opportunities to run for local, state, or national office.
- ☐ Being elected an officer by one's peers is an honor and carries the responsibilies of:
    - putting the organization first.
    - speaking in front of groups.
    - planning conferences.

Course overview

- ☐ **Classroom equipment**—the office equipment needed for microcomputer applications has been determined by the essential elements and by the course competencies. The equipment reflects the current skills needed by the beginning worker.
- ☐ **Units**—microcomputer applications includes sixteen units under the following sections:
    - ▲ **Introduction to Business Information Processing**—review of purposes, information and activities, classroom organization, evaluation techniques, contemporary office systems, and social implications.
    - ▲ **Word Processing**—document production and document formatting.
    - ▲ **Business Communications**—writing techniques, telephone techniques, and transcription techniques.
    - ▲ **Information Management Tools**—records management, database management, and spreadsheets.
    - ▲ **Information Processing Tools**—telecommunications and desktop publishing.
    - ▲ **Closure of course**—review of the course, with emphasis on competencies gained through the course.

- **Competencies**—the ability to do something. The ability to do something includes attitudes, values, skills, and/or knowledge. Most of the competencies included in this course are job-related.
    - Competencies to be developed will be introduced at the beginning of each unit.
    - A competency checklist is included at the end of each unit.

- **Evaluation**—a variety of methods are used to evaluate performance and knowledge. The methods include:
    - In-class activities.
    - Outside assignments.
    - Skill performance.
    - Tests.

- **Classroom organization and management**
    - The organization of the classroom has been established to provide optimum experiences for learning. Class size and number of machines are determining factors in classroom organization.
    - For management purposes, it is necessary to establish policies and/or procedures to ensure quality of performance. For example:
        - Care of equipment
        - Use of supplies

SECTION 1

Business Information Processing

Unit 2: Contemporary Office Systems

Unit Objective: Students will gain an understanding of new technology and the organization of the contemporary office, including information processing terminology, hardware, software, and procedures.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology related to information processing in the contemporary office.
2. Describe the organization of the office environment and the responsibilities required.
3. Discuss the information processing cycle.
4. Discuss hardware used in business.
5. Describe software used in business.
6. Identify emerging technology that impacts business information processing by using current literature.

Focus: Information processing is a vital part of every office. Knowing the organization's overall structure enables you to access and send information to the appropriate person in a timely manner. Having knowledge about information processing hardware, software, and procedures gives you the opportunity to perform tasks quickly and efficiently.

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Terminology

Bit	Abbreviation of binary digit. A bit can be 0 or 1.
Bus	The nervous system of the computer that connects the CPU to itself and to other components of the system.
Byte	Usually an eight-bit configuration where one character can be stored.
Capacitance	The quantity of electricity that a power source can deliver under specific conditions.
Central processing unit (CPU)	A microchip which handles most of the processing in the computer. It is divided into two parts—the Authmetic Logic Unit and the control unit. It is thought of as the brains of the computer.
Character	A single letter, number, or special symbol.
Clock	A crystal that vibrates at a high frequency. All operations within the CPU are synchronized to these regular vibrations.
Coaxial cable	A means of transmission that consists of a tube of electrically conducting material that surrounds a central conductor held in place by insulators.
Communicating	Transferring data from one place to another.
Concentric	Circles that have a common center.
Digitizer	A hardware component that converts visual or audio information into digital codes that can be stored and processed by a computer.
Fiber optics	A means of transmission using glass fiber.
File	Collection of information stored on a disk.

Floppy disks	A piece of mylar plastic that has a mylar coated surface where magnetic images can be recorded. The disk is housed inside a protective jacket and turns inside the jacket.
Fonts	Type sizes and styles available for printing.
Footprint	The amount of desk space a computer occupies.
Hard cards	Devices that allow additional storage to be placed on an expansion port and used as an extra disk drive. They cost a little more than a regular hard disk but do not require an opened disk drive slot in the front of the computer.
Hardware	The physical parts associated with the computer.
Input	Raw data that are entered into the computer.
Input devices	All hardware components that allow data to be entered into a computer system.
Kilobyte (K)	A measurement of a computer's memory; 1024 bytes.
Laser disk	Data are stored by burning tiny holes in the surface with a laser beam—the same technology as compact disk audio systems.
Magnetic disk	Data are recorded as magnetized spots on either floppy or hard disks. Information is recorded to and read from the disks by a read/write head located in the disk drive which senses the magnetic spots.
Magnetic tape	Oxide coated tape contained in cassette tapes or tape drives that are used as storage devices.
Mainframe	Computers built for very fast operations; usually centralized in a specific area for processing data.
Megabyte (MB)	One million bytes.
Megahertz (Mhz)	A clock speed measurement for millions of cycles per second.
Microcomputer	Computer that will sit on a desktop. The name comes from its main computing component which is located on one integrated circuit or chip.

Minicomputer	Moderate sized computer. Used when a microcomputer is not powerful enough to do the job.
Modem	Computer hardware component used to send and receive digital signals over telephone lines.
Mouse	A pointing device for the computer screen.
MS-DOS systems	All IBM compatible computers.
Multitasking	Allows more than one program to run at the same time.
Operating system	A set of commands and files that contains the information the computer needs to access the disk drives of the system.
Optical	Relating to vision such as an *optical mouse* that "sees" where to go.
Pixel	A single dot on a computer screen.
Processing	Takes place when facts are manipulated to produce results.
Pro-DOS	The best and most current operating system for Apple IIc, IIe, and IIgs microcomputers.
Random access memory (RAM)	Where programs in use are stored. Part of memory that stores data before they are processed, it is erased when the computer is turned off.
Read only memory (ROM)	Contains chips that store permanent instructions for the computer.
Register	Memory location within the CPU where data are held for processing.
Resolution	The number of dots used to make up an image.
Scale	The size of an image or character.
Secondary memory	Recorded memory that the processor can access to perform its instructions.
Supercomputer	Large computers with fast processing speeds that can access billions of characters of data.

Syntax	Refers to the exacting way that commands must be keyed in and arranged for the computer.
Tracks	A series of parallel or concentric paths along which data are recorded on magnetic material.
User	The person using the computer.

Office organization and responsibilities

- ☐ Organizational charts
  - ▲ An organization can be viewed as a system.
    - Open systems interact with the environment. Customers, vendors, other organizations or external entities or influences are all considered part of the environment. The system receives data and information from the environment and returns it to the environment.
    - Closed systems do not interact with the environment.
    - An open or closed system can be open-looped or closed-looped. An open-loop system has no feedback. A closed-loop system incorporates feedback.
  - ▲ An organization may have many levels or just a few levels.
    - The top level of the organization, also known as the strategic planning level, is normally limited to the president or vice-president. Long-range objectives are set at this level.
    - The middle level of the organization consists of division heads, regional managers, and directors.
    - The lower level of the organization consists of department heads, supervisors, and group leaders. This level is responsible for carrying out the objectives. The operations actually occur at this level.
    - The employees are classified by their respective functions. Function areas are, for example, word processing, personnel, payroll, marketing, and various other departments. Each employee plays an important part in an organization and makes a contribution toward achieving its objectives.
  - ▲ Although organizations may differ greatly, most offices perform similar duties.
    - They normally have someone, such as a receptionist, who greets clients.
    - Generally, they all have clerical workers.

        - Word processors generally key in letters, reports, and other forms of correspondence. Many word processors are assigned to a specific person (such as a vice-president) or to a department.
        - Data entry clerks normally input data into a computer. The data may be retrieved at a later time by the person requiring the information.
        - Filing clerks file correspondence, reports, invoices, and various other paper documents that must be kept for later use.
    - Accounting personnel are needed in all offices. Money exchanges hands whether the organization is profit or nonprofit. Bills must be paid and supplies must be purchased.
    - If an organization is selling or manufacturing a product, the organization will have marketing or production agents.

☐ Data and information flows—data and information may flow together; however, data are raw facts, and information is data that have been transformed into something meaningful and useful. Data flows through informal channels called "the grapevine" and through formal channels.

- ▲ Data and information flow directions.
    - Horizontal—the flow of information among employees on the same level.
    - Vertical—the flow of information from the top to the bottom or from the bottom to the top within a department.
    - Diagonal—the flow of information among different levels and different departments.
- ▲ Data can flow on a large scale or on a small scale.
- ▲ Data are input, processed, output, and controlled by someone for an objective.
    - Computer data flow begins when the data are input by the keyboard operator. Data are then processed by the central processing unit (CPU). The output could be a report or a document. The control could be the instructions for the assigned task or even the person(s) requesting the output.
    - Another way of looking at data flow is to use a human as an example. Data are input through the senses. The data are then processed by the brain. The output is speech or writing. The control might be morals, ethics, or purpose.

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- ▲ Data will normally flow in a regular path, whether they flow through a single person or a major conglomerate.

Information processing cycle

- ☐ Defining information processing
  - ▲ Information is a collection of characters, symbols, and numbers that express an idea. Information:
    - Is the orderly arrangement of facts.
    - Should be accurate, timely, concise, and complete.
    - Is used as a basis for making decisions.
    - Is the basis for the success of most businesses because it must be received in an efficient, timely manner.
  - ▲ Information processing is an automated way of manipulating information from point of origin to finished document. New technology facilitates faster, better, yet cheaper information processing. People, procedures, and equipment are the three major elements involved in information processing. The information processing cycle has five steps:
    - Input or origination is the process of converting raw facts and data into usable information. Relaying this information may be done by a variety of methods.
    - Processing involves converting the information from dictated or handwritten form to a finished document.
    - Output, printing, or reproduction involves the output of material from a computer that is ready to be copied or printed.
    - File, storage, and retrieval is the efficient storage of documents on disk or hardcopy to facilitate information retrieval when the information is required.
    - Distribution or communication is the presentation of the information in a timely and pleasing manner whether by hardcopy or telecommunications.

Computer hardware used in offices

☐ Types of computer systems

- ▲ **Supercomputers**—large computers with fast processing speeds that can access billions of characters of data. The CRAY is one of the best-known examples of supercomputers. The CYBER is another example of a supercomputer. They are used in applications such as nuclear physics, meteorology, and petroleum engineering.

- ▲ **Mainframes**—computers built for very fast operations that are usually located in a centralized area for processing data. They are used for very complicated computations and may require a specially designed room with air conditioning and a subfloor which covers the cable that connects the processor with the input and output devices. The mainframe serves many computer users because they can support large networks of individual terminals and remote job-entry locations. They are used by banks, large commercial and industrial companies, and government agencies. Most professional programmers work in a mainframe environment.

- ▲ **Minicomputers**—moderate-sized computers which occupy their own floor space. They can be conveniently moved because they have no special power or environmental control requirements. Minicomputers are smaller, slower, and less expensive than mainframes but perform the same tasks as mainframes (only on a reduced scale). Minicomputers store and retrieve data from the same type of input and output devices as mainframes do, but they have a smaller storage capacity.

- ▲ **Microcomputers**—also known as personal computers or desktop computers. The name "microcomputer" comes from microchip, its main computing component, which is located on one integrated circuit chip. They are limited in the volume of data they can process. Mirocomputers can fit on a desk or table, and do not require a data processing expert to operate them. They support peripheral devices.

- ▲ **Portable, laptop, and notebook computers**—the smallest computers now available have all the features of microcomputers. A variety of disk drive combinations are available. The footprint, or amount of desk space the computer requires, classifies the computer. Most screens use a liquid crystal display (LCD) similar to most digital watches; however, other types of displays can be used. Most of these smaller computers have built-in rechargeable power supplies.

☐ Input devices

- ▲ **Keyboards** are the classic input devices for computers. They are inexpensive and effective.

- Standard XT keyboards have 88 keys. The letters and numbers are laid out in patterns similar to those on a typewriter. The function keys are on the left and the arrow keys are on the right.

- Enhanced 101 key or AT keyboards have several extra keys, including two extra function keys, and have all function keys in a single row above the regular number keys.

- Apple II keyboards do not have function keys; however, they do have the open apple and close apple keys which in combination with other keys operate as function keys.

- Macintosh keyboards do not have function keys, but they have a key similar to that of a control key on an MS-DOS system. Most functions are controlled through the menu bar by using the mouse to point and click.

- Other keyboard devices capture key information onto magnetic tape or magnetic disk.

▲ **Mice** are pointing devices used with the computer screen. A mouse allows commands to be chosen from on-screen menus, foregoing the necessity of typing in the commands every time they are used.

- Mechanical mice track desktop movement by measuring the movements of a rolling ball housed in the puck which is dragged across a surface. The mechanical mouse will work on any flat desktop surface.

- Optical mice track movement by measuring changes in the puck's position in an underlying coordinate grid in the mouse pad. An optical mouse will only work when moved on top of the optical grid pad.

▲ **Touch screens** react and respond to contact.

- Pressure-sensitive screens have a matrix of wires built-in on mylar sheets. When the surface of the screen is pressed, two wires connect to tell the computer the location that was touched on the screen.

- Infrared light screens have invisible light beams crisscrossing the surface of the screen in a grid pattern. When the screen is touched, the finger breaks the beam of light and signals the computer to respond accordingly.

- Capacitance is the quantity of electricity that a power source can deliver under specific conditions. The screen can sense a change in electrical capacitance when it is touched by the finger.

▲ **Light pens** are pointing devices similar to mice. They have gained in popularity and are used in applications other than business, in classrooms, or by the handicapped.

- ▲ **Joy sticks** are very popular input devices for personal computers. They are used primarily with games.

- ▲ **Voice recognition screens** are slowly becoming more reliable. Most voice recognition systems require the user to train the system.

- ▲ **Optical scanners** have been available for several years, but only since 1986 has their cost come into a reasonable range for microcomputer users. Scanners are of particular value in desktop publishing.

  Capabilities

  - With image scanning, anything printed on paper, including photographs, can be fed into the scanner, read optically, and the results digitized and sent to the computer's memory. The quality of results varies considerably with the type of image. The software that accompanies the scanner has options permitting the user to adjust for brightness and contrast as well as scale.

  - Optical character recognition may include software that interprets patterns to recognize characters that are printed using certain fonts. The advantage of this feature is that once read into memory, the text can be captured as a word processor file and then edited. As more fonts are made available for scanners, the value of this feature increases.

  Types

  - **Flatbed**—the piece of paper to be read is placed on a flat glass surface, similar to a copier. The advantage of this type is that pages from books or magazines can be read without first having to make a copy of them.

  - **Sheet feed**—as the name implies, the material to be read is fed into a slot and passes by the optical reader as it goes through the scanner. It has the advantage of continuous feeding when multiple pages are to be read.

- ▲ **Digitizers**—are used to convert visual or audio information into digital codes that can be stored and processed by a computer. Cameras designed for video recorders can be used to capture images that are then digitized.

☐ Processing equipment

- ▲ **Central Processing Unit** (CPU) can be thought of as the brain of the computer. Traditionally, it is one processor doing one job at a time in one computer. The common processors are chips that contain circuits and control what is happening within the computer.

  - MS-DOS machines—Intel 8088, 8086, and 80286—16 bit; and the Intel 80386 and 80486—32 bit.

- Apple family of computer—Macintosh, Motorola 68000 series—32 bit; Apple IIe, Motorola 6502—16 bit.

Parts of the CPU

- **Clock—**a crystal that vibrates at a high frequency. Clock speed is measured in millions of cycles per second or Megahertz (Mhz). Common clock speeds vary from 1.7 to 25 Mhz.

- **Bus—**the nervous system of the computer. Connects the CPU to itself and to the other components of the system, but communication can only take place one message at a time. Bus width is important because it is the number of bits that the bus can carry at once to communicate a message. The following are some common widths and computers in which they are used:

  - 8 bit—XT and Apple IIe.
  - 16 bit—AT and lower PS/2 line.
  - 32 bit—386, 486, upper PS/2 line, and Macintosh 68000 series.

- **Registers—**memory locations within the CPU where the CPU holds data for processing. The larger the registers, the larger and more powerful the CPU. The common sizes are 8, 16, and 32 bit. Each CPU has several registers, some for special purposes.

  - The instruction register holds the location of the next instruction to be executed.
  - The decoding unit decodes instructions read from memory.
  - The accumulator is the main register for containing data which is being manipulated.
  - Working registers are additional registers that hold the data and addresses being manipulated.

▲ **Arithmetic Logic Unit** (ALU) is used for some instructions required for mathematical or logical operations to be carried out on data.

☐ Output devices

▲ **Monitors—**resolution means how many dots are used to make up an image. The computer screen is composed of many little dots called pixels that visually blend together to form an image. The more pixels there are on a screen, the clearer that screen's images will be.

Color monitors must use three color pixels: red, green, and blue—the primaries of light. The composite color image is formed by turning on these three primary colors in various combinations and intensities. Using three pixels in place of one decreases the resolution; therefore, to have a comparable level of resolution with the monochrome monitor, the color monitor must have three times as many pixels.

Types of monitors

- Color Graphics Adapter (CGA) monitors have the lowest resolution and will display four colors at a resolution of 640 by 200 pixels. This is adequate for some applications. The CGA monitors are the least expensive color monitors.
- Enhanced Graphics Adapter (EGA) monitors are good quality color monitors. They are the next step up in display resolution. The EGA display will show 16 colors at once out of a total of 64 colors, at a resolution of 640 by 350 pixels.
- Hercules monochrome monitors have similar resolution to the EGA. This monitor is driven by the Hercules compatible graphic adapter and it provides a resolution of 752 by 350 lines in two colors. This display has acceptable resolution for most applications and is by far the most cost-effective display system available, with many companies selling both monitor and display adapters as a kit for under $100.
- Vector Graphics Array (VGA) monitors have a higher resolution than the EGA. They start at a resolution of 640 by 480 pixels and go up to around 1200 by 1000 pixels. VGA monitors can display 256 colors out of a palette of at least 4000. Some let you choose from up to 16 million colors.
- Super VGA monitors have been announced that will have truer and clearer color. They have a resolution of 1,024 by 768. They can usually display 256 colors or more at all resolutions. Some of the monitors are on the market, but at this time they are very expensive.

▲ **Printers**—categorized as either impact or nonimpact. An impact printer will put the image onto the paper by some type of printing mechanism striking the paper, ribbon, and character together. Nonimpact printers place the image on paper without striking the paper.

Impact printers

- Dot matrix printers represent characters by selecting certain dots out of an established matrix which is nine dots high and 12 dots wide. For a higher quality print, the pattern of dots is moved slightly and repeated which results in a more dense pattern of dots. These darker letters are called near-letter quality.
- The quality of 24-pin dot matrix printers approaches that of laser printers and is often called letter-quality. Color option kits are also available for 24-pin printers, making them an excellent candidate for graphics applications.

- Daisy wheel printers have a wheel with letters and characters on the end of spokes which are rotated and hit with a hammer to strike the paper—much like a typewriter. Daisy wheel printers are an economical source of letter-quality documents and come in a variety of type styles, but have no graphics capability.

Nonimpact printers

- Laser printers use the same thermal-transfer engine as personal photocopiers. Because of this, their quality is very high. the resolution of the laser printer is 300 dots per inch (dpi). Some of the newer ones are in the 600 dpi range. This is referred to as typeset quality.
- Postscript laser printers can reproduce anything that can be produced on the computer. The Apple Laser Writer was the first postscript printer.
- Ink jet printers offer similar resolution to that of the laser printer and are less expensive. They are also lightweight and make good portable printers. Some ink jet printers come with several colors.
- Plotters use a computer-controlled pen to draw images and are used exclusively for graphics. Pens can be changed to produce almost any color. A plotter can draw any image the computer can produce.

☐ Input and output devices

Modems can be used to input or output data. A modem is a hardware component that can send and receive digital signals over telephone lines. Modems can be either internal—located within the computer case, or external—in a separate case of their own. The Hayes compatible modem is the most widely used type. Modems are either direct connect or acoustic coupler and come in several speeds: 300, 1200, 2400, and 9600 baud. Direct connect modems are most commonly used.

Features of modems include auto-answer, auto-disconnect, auto-dial, auto-redial, and time-delay. Methods of transmission include phone lines, coaxial cables, microwave, satellite, and fiber optics.

☐ Storage

▲ **Primary memory** stores the program being executed, data being used, and the operating system of the computer. It serves as a buffer between fast and slow operations and represents screen images. Primary memory is organized into a sequence of locations. The locations are numbered, and each number is called an address. Each byte or word in an address is called that address's contents.

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Types of primary memory

- Read Only Memory (ROM) cannot be changed. It is set at the factory by the manufacturer. ROM includes such operations as how to start the computer and how to control the screen.
- Random Access Memory (RAM) can be changed. The processor can read and write this memory. RAM must have continuous power to keep its data intact. It is referred to as volatile. RAM is stored in chips grouped in multiples of eight. Common sizes for microcomputers are 640 K and above.
- Memory is measured in K or Kilobytes (1024 bytes). In 1992 the following memory requirements are needed:
  - 640K is considered adequate for basic home computing.
  - 2MB is considered adequate for basic business applications at this time.
  - 3MB is considered adequate for business computing with some graphics.
  - 4MB+ is required for fast computing with graphics.

▲ **Secondary memory** consists of three types of storage. Recorded memory is storage that the processor can access to perform its programming. On-line storage is memory that can be reached electronically. Off-line storage is memory that requires mechanical help.

- Floppy disks are made of mylar plastic that has been coated with a surface that can record magnetic images.

  Characteristics

  - The disk is housed inside a protective jacket and revolves inside the jacket.
  - The disk drive writes on the disk through the read/write window which is a small notch located in the upper right corner of the disk.
  - Information on the disk can be protected by placing a foil tab over the read/write window. This is called a write protection tab, and it keeps the read/write head of the drive from recording information on the disk.
  - Information is stored in concentric rings called tracks. Each track is organized into several sectors, each separated by a space.
  - Some disks come with sectors prerecorded at the factory called hard-sectored disks. Disks without prerecorded

sectors are called soft-sectored disks which must be formatted before they can be used.

- Data on disks are organized into files. A particular file may contain either programs or data. Each file must have a file name of up to eight characters and a period followed by a file extension of three letters.

Disk sizes

- The 5.25-inch disk is used on both the Apple II and MS-DOS systems. The capacity for an Apple disk is 140K, and capacity for a MS-DOS disk is 360K or 1.2MB.
- The 3.5-inch disk has a hard plastic case and is sometimes called a "stiffy." It has a capacity of 720K or 1.44MB. The stiffy can be used on MS-DOS and Macintosh systems.

Care

- Physical damages can result from fingerprints, extremes in temperature, bending, dirt, dust, and being written on with a ball point pen.
- Magnetic interference can result from close contact with magnets, televisions, radios, and some telephone receivers.

- Hard disks were developed by IBM. The early ones were called Winchester disk drives because their storage capacity, two disks at 30MB each, was similar to the caliber of the famous Winchester rifle (30/30). Standard sizes are from 20 to more than 370MB. Access time is the time it takes to retrieve a specific piece of information and is usually measured in nanoseconds or picoseconds. The read/write head flies over the surface of the hard disk at about 1/1,000,000 of an inch. A particle of dust would be 100 times this size.
- Optical disk storage systems use the same laser disk technology used in the recording of music on compact digital disk audio systems. The storage capacity is great, with each disk holding 300MB or more. The disks are removable, so storage is unlimited. Read only disks are now available which contain such useful information as the *United States ZIP Code Directory*, *Compton's Unabridged Dictionary*, and *The Encyclopedia Britannica.*
- Bernoulli boxes are devices that are located externally to the computer and store data on either 10 or 20MB removable cartridges, allowing virtually unlimited storage.
- Hard cards are devices which allow additional storage to be placed on an expansion port and used as an extra disk drive. They cost a

little more than a regular hard disk but do not require an open disk drive slot in the front of the computer.

▲ CD-ROM is a compact disk with data—text, pictures, sound, video—that a computer can read.

Characteristics

- A CD-ROM drive can be connected to any computer. It is like a huge hard disk that has an extremely fast access time despite the fact it can store more than 550,000,000 bytes of data.
- It is predicted that the CD-ROM drives will become a standard computer peripheral.
- The disks are called ROMs because they can be read, but not written to.
- Computer circuit boards are available for MS-DOS and Macintosh computers for interfacing a compact disk player with the computer.
- Currently, CD-ROM software is limited, but that should change rapidly.
- CD-ROM is primarily a business product, and until the cost lowers, it will not reach the home market.
- One of the primary uses of CD-ROM is the storage of large volumes of data that do not change often. Entire encyclopedias are available on CD-ROMs.
- An entire bookshelf of resources can be stored on a CD-ROM disk. *Microsoft Bookshelf* is a disk that contains an entire dictionary, *Roget's Thesaurus*, a spelling checker, the *United States ZIP Code Directory*, *Bartlett's Quotations*, the *Chicago Manual of Style*, many business forms and form letters, and several tutorials. These disks are used in education, libraries, and various businesses that require vast amounts of information. Other CDs available include a library of files from over 900 public domain disks and the *Grolier Encyclopedia*.

Computer software used in offices

☐ **Operating system—**contains a set of instructions that tells the computer where and how to communicate with disk drives, monitors, keyboards, and other peripherals; allows several application programs to run; and does file management.

Types of operating systems

- ▲ Microsoft Disk Operating System (MS-DOS) is the primary operating system used by IBM and compatible computers. Several versions have evolved over the years.
- ▲ The OS/2 operating system was designed by Microsoft in cooperation with IBM for its new family of PS/2 computers. Some consider it the state-of-the-art operating system for managing information on the computer.
- ▲ UNIX was developed by AT&T. This operating system is used primarily by engineers and programmers. Most computer users will never work with this high-end system.
- ▲ The Apple II family uses both Apple DOS and Pro-DOS (Professional Disk Operating System). Pro-DOS is faster, easier to use, and more powerful than Apple DOS.
- ▲ The Macintosh operating system is written exclusively by Macintosh, and is meant to be completely invisible to the user. The system uses a menubar. The user uses a mouse to point and click on the bar to access pop-down menus.

☐ **Environments**—manage the operating systems which are hidden beneath them.

- ▲ *Windows* for MS-DOS systems is a graphical user interface or GUI (pronounced "gooey"), which means it uses pictures (icons) to help the user communicate with the computer. The mouse is used to click on icons to access programs and files easily.

  Characteristics

  - DOS is required to run *Windows* but it remains hidden beneath it. *Windows* helps manage DOS.
  - Multitasking—allows running more than one program at the same time.
  - Data can be integrated among the *Windows* applications.
  - Dynamic Data Exchange (DDE) allows "Hot links" to be created so that all the same data can be changed across-the-board after changing the data in only one place.

- ▲ *Hypercard* environment is available exclusively for the Macintosh operating system. It allows the organization of information in stacks of electronic index cards which are accessed by clicking on the mouse buttons and the buttons on the cards. *Hypercard* includes *Hypertalk.*

Hypertalk

- Allows the user to program, design, and customize his/her own application software.
- Allows the user to create applications only limited by the user's imagination.
- Includes the use of pull-down menus, dialog boxes, scrolling text fields, buttons, and icons.

☐ **Programming languages**—translate steps to be performed into detailed instructions the computer understands. The following are a few examples of programming languages.

- ▲ **Machine language**, unique to each computer, is written in binary code, and all other languages must be converted to machine language before the computer can understand.
- ▲ **Assembly language** was developed in the early 1950's to make using machine language easier. Assembly language replaced the binary code with symbolic names that were easier to remember.
- ▲ **FORTRAN (FORmula TRANslator)**, the oldest high-level language, was developed primarily for engineering, mathematical, and scientific applications.
- ▲ **COBOL (COmmon Business-Oriented Language)** was developed in 1960 for business applications. COBOL was designed to be easy to understand, maintain, and modify.
- ▲ **BASIC (Beginner's All-purpose Symbolic Instruction Code)** was developed at Dartmouth college to help students learn to program. This high-level language is simple, flexible, and can be learned by people with no programming experience.
- ▲ **PASCAL** was named for Blaise Pascal, a French inventor. This high-level language is easy to use, powerful, flexible, and self-documenting.
- ▲ **C** was developed by AT&T to shorten the system programming time. It can be used on all computers.

☐ **Utilities**—programs designed to enhance and improve PC operations. Many are available as public domain disks. Utilities can be used for options such as undeleting a file that has been deleted accidentally and to back-up and to restore files. DOS contains many of these utilities. Some software programs allow users to perform the commands by a click of a mouse or a single keystroke. Examples include *Norton Utilities* and *PC Tools*.

- **Applications software**—usually prepackaged software that enhances the operation of microcomputers. Some examples of business application software programs are:
  - Word processing programs manipulate words for letters, research papers, books, etc. Examples of word processing programs used in business are *Microsoft Word, Microsoft Works, PFS Professional Write, WordPerfect,* and *Wordstar.*
  - Database programs organize and sort lists of information. Examples of database software used in business are *dBase III* and *IV, Reflex, Paradox, R:base,* and *Q and A.*
  - Spreadsheet programs perform mathematical calculations on columns and rows of numbers. Examples of spreadsheet software programs used in business are *Lotus 1-2-3, Excel, Quattro Pro,* and *Multiplan.*
  - Communications programs allow communication between computers over phone lines. Telecommunication has increased in popularity because connecting computers and data increases productivity and saves time and money. Some integrated packages have communication programs included such as *Microsoft Works.* Other programs are stand-alones such as *ProComm.*
  - Graphics programs are designed specifically for the graphic representations of data. No area of development has advanced more than graphics. Examples of graphics software programs are *Corel Draw, Deluxe Paint 2000, AutoCAD,* and *Harvard Graphics.*
  - Page-layout programs are designed for desktop publishing. Desktop publishing has become popular because businesses can now design and print their own advertisements, flyers, brochures, and various other documents with minimal cost and time consumption. The two most popular examples of high-end programs are *Xerox Ventura* and *PageMaker* which are available for both the MS-DOS and Macintosh systems.
  - Integrated software packages offer several programs in one bundle such as a word processor, a spreadsheet, a database, and graphics or communication programs. Examples include *Microsoft Works, Apple Works,* and *Lotus Works.*

Changes in office technology

- Technological advances
  - **Multimedia**—this type of technology allows a user to incorporate information from CD-ROMs, video tape, audio tape, voice overlays, computers, and various other types of equipment and media. Presentations become more interesting, and learning becomes interactive.
  - **Suites**—a group of freestanding applications that share a consistent user interface and are sold as a set. This type of software "bundling" has become popular since

information needs to be shared among programs and people. *Windows* is used with the various programs.

- *Microsoft* has a version that includes the *Windows* versions of *Word, Excel, Powerpoint*, and *Mail.*
- *Lotus* has another version that includes *1-2-3, Freelance Graphics, Ami Pro*, and *CC:Mail.*

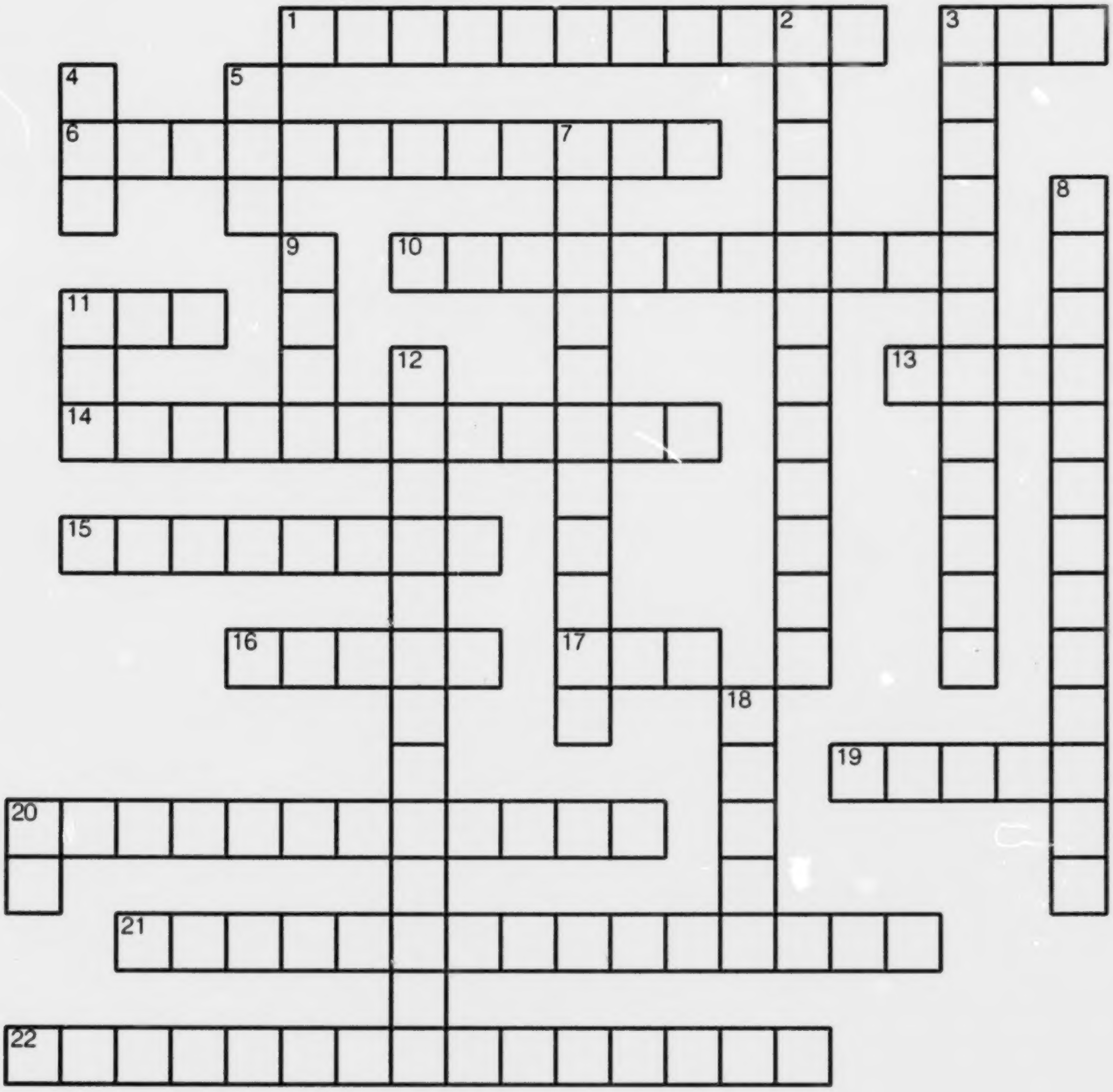
▲ Electronic data exchange—offices using this type of recordkeeping are no longer being required by the IRS to keep hardcopies as "official" records. The IRS requires companies to keep the computerized records for as long as their contents may be relevant to tax laws, ensure that records created on older systems can be retrieved by replacement systems and maintain complete documentation of the system (including software changes and security controls).

▲ *WordPerfect* is now challenging *Microsoft* for the "*Works*" market. *WordPerfect* has recently announced its version of *Works*. This program combines *LetterPerfect* (a short version of *WordPerfect*), with a graphics editor, database, spreadsheet capabilities, and a communications application.

▲ Intel has recently announced that the new 586 chip will soon be on the market. This microprocessor will be even faster than the 486 chip and are very costly.

Activities

ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE



ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE CLUES

ACROSS

1. A means of transmission using glass fiber.

3. A clock speed measurement for millions of cycles per second.

6. All hardware components that allow data to be entered into a computer system.

10. A piece of mylar plastic that has a mylar coated surface where magnetic images can be recorded.

11. Contains chips that store permanent instructions for the computer.

13. Usually an eight-bit configuration where one character can be stored.

14. Data are recorded as magnetized spots on either floppy or hard disks.

15. The physical parts associated with the computer.

16. A crystal that vibrates at a high frequency.

17. The brains of the computer.

19. Raw data that are entered into the computer.

20. Used when a microcomputer is not powerful enough to do the job.

21. A set of commands and files that contains the information the computer needs to access the disk drives of the system.

22. Recorded memory that the processor can access to perform its instructions.

DOWN

2. A means of transmission that consists of a tube of electrically conducting material that surrounds a central conductor held in place by insulators.

3. All IBM compatible computers.

4. Abbreviation of binary digit.

5. The nervous system of the computer.

7. The quantity of electricity that a power source can deliver under specific conditions.

8. Large computers with fast processing speeds that can access billions of characters of data.

9. Collection of information stored on a disk.

11. Where programs in use are stored.

12. Computer that will sit on a desktop.

18. Type sizes and styles available for printing.

20. One million bytes.

ACTIVITY 2: ORGANIZATIONAL STRUCTURE

Draw an organizational chart. Using the chart, explain the organizational structure of most businesses and the responsibilities generally required. Include in your explanation information and data flow throughout the business. Place all this information into a portfolio that will be turned in to your instructor after all activities have been completed.

Activities

ACTIVITY 3: INFORMATION PROCESSING CYCLE

Use your imagination and creativity to design a poster illustrating the parts of the information processing cycle.

ACTIVITIES 4-5: COMPUTER HARDWARE AND SOFTWARE

Using current magazines and periodicals, collect information on computer hardware for a portfolio. Your portfolio should consist of pictures, descriptions, and other types of pertinent information about computer hardware and software. Include information about various types of computers, input devices, output devices, peripherals, and storage. Your portfolio should be organized as follows.

Section I: MS-DOS Systems

Hardware
Software

Section II: Macintosh Systems

Hardware
Software

Activities

ACTIVITY 6: CHANGES IN OFFICE TECHNOLOGY

Using current periodicals, research at least two changes that have occurred in the office environment or organizational structure during the past two years. Be prepared to discuss your research with the class.

SECTION **1**

Business Information Processing

Unit 3: Social Implications

Unit Objective: Students will describe issues related to the responsible use of computer systems, discuss social ramifications of computer usage, and identify responsible practices in the use of computers.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology related to computer crime, computer users, and new computer devices and techniques.
2. Identify major issues and technological developments related to computers and society.
3. Describe ethical and legal issues that have arisen as a result of the computer revolution.
4. Identify privacy issues involved with electronic data storage.
5. Explain reasons for concern about the reliability of computer systems.

Focus: The responsibility that goes with using a computer is like the responsibility of driving an automobile. If the user is irresponsible, careless, or malicious, the effects of his/her decisions and actions can be damaging and far-reaching.

Social Implications 1-3

Terminology

Artificial Intelligence (AI)	A computer science field that attempts to improve computers by giving them some characteristics associated with human intelligence, such as the ability to understand natural language and reason under uncertain conditions.
CD-ROM	The current compact disks for computers, similar to read-only memory; they cannot be erased or recorded on.
Computer crime	Any illegal act for which knowledge of computer technology is used to commit the offense.
Computer ethics	The standard of moral conduct in computer use; the way in which the "spirit" of some laws is applied to computer-related activities.
Data spying	Intentional illegal access to data.
Decision support system	An information-producing system aimed at a particular decision a manager must make.
Encryption	Data that has been translated into a secret code for security reasons.
Expert system	A program that mimics the decision-making logic of human experts.
Hacker	A computer enthusiast who breaks computer security measures designed to prevent unauthorized access to a particular computer system.
Hypergraphics	A method used in teaching or training that allows students, the teacher, and the computer to interact through the use of a response pad and an interconnection box.
Paperless office	A term that implies that all paper documents have been replaced by electronic media and devices.

Piracy	The unauthorized copying of a computer program.
Robotics	The science that deals with robots; their construction, capabilities, and applications.

Terminology—Viruses

Alameda virus	Replaces the original boot sector with itself; causes loss of data.
Computer virus	A segment of machine-language code that replaces software or data with a copy of itself without authorization.
Datacrime	A virus that breaks down the directory section, making it impossible for a disk's contents to be read.
Hidden virus	A virus that leaves no external signs of its presence after infection.
Host program	The program to which the virus attaches itself.
Infection	The invasion of a virus into a host system.
Isolation	The process a virus uses to identify and distinguish itself from its host program.
Israeli virus	Infects any .COM or .EXE program. Some versions destroy all data on the hard disk, which makes stored programs disappear.
Lehigh virus	Infects COMMAND.COM file; causes loss of all data on hard disk.
Logic Bomb	A virus that checks for a certain action, such as whether an infected program has been executed a given number of times.
Network worms	Programs that use network connections to spread from system to system. They can behave like a virus or plant a virus.
nVIR	Appears in many different varieties, each with its own individual activation characteristics. Causes loss of data and programs and frequent system crashes.
Pakistani Brain virus	Replaces original boot sector with itself and spreads quickly to all bootable disks.

Peace virus	A virus that was created to spread a greeting of world peace and then erase its own instructions, disappearing without a trace.
Replication	The process of self-isolation within the current host program and attachment of the isolated segment to a new host.
Scores virus	Infects any application and causes loss of data due to system crashes.
Time Bomb	A virus that checks for a specific date or time (such as Friday the 13th) before executing its objective.
Trap Door	A segment of code that allows data to be transmitted to the legitimate operator while other data are transferred to an illegal operator.
Trojan Horse	A programmer's placement of unauthorized instructions in a computer operating system for future use in gaining access to restricted information.
Vaccine	Program that watches for typical things viruses do, halts them, and then warns the computer operator.

Unit Overview

Computer use issues

As computers do more work in society, new social issues and questions emerge. Many questions arose during the period when large mainframes took over data management in banks, insurance companies, financial institutions, and other large corporations. Others appeared with the proliferation of microcomputers. Effects of computer usage are felt by all of us.

☐ **Dependency**

There are dozens of ways in which our daily activities could be crippled by computer or power failure. Anyone who has had to wait for several minutes because "the computer is down" knows what it means to be dependent on computers. Not learning the status of a credit card account is minor compared to the failure of the police or fire department emergency computer system or an airline reservation system. In many situations, a "manual" substitute, or backup, is totally unsatisfactory.

☐ **Nameless society**

Can we accept being identified by a number instead of a name? We are known to some organizations by our social security number, to others by our drivers license number, and to others by an account number. If we respond to a computerized billing error, we have no assurance that a human will ever see the response. It is unclear what effects this namelessness will have on the quality of our lives or where these effects will lead.

☐ **Technological developments**

- ▲ **Artificial Intelligence (AI)**—a computer science field that attempts to improve computers by giving them some characteristics associated with human intelligence, such as the ability to understand natural language and to reason under uncertain conditions. It is used in expert systems, decision support systems, and robotics.
- ▲ **Robotics**—the science that deals with robots; their construction, capabilities, and applications. Robotics are used for repetitive work, as interoffice mail carriers, in warehouse operations, when working with radioactive materials, and by the handicapped.
- ▲ **AFIS**—automated fingerprint identification system is a computer system that scans a database for fingerprints. It is used by law enforcement agencies and can be used with an expert system to match similar prints.

- **MDT**—mobile digital terminals are small computer terminals located inside a patrol car. They shorten response time to calls and provide direct computer access to information, such as names and license plates.

- **CD-ROM**—compact disks for computers are similar to read-only memory; they cannot be erased or recorded on. They are about the same size as a floppy disk, but allow storage and retrieval faster than floppy disks. Each one can hold a gigabyte (a million megabytes) or more. They are used in libraries for storing archival materials.

- **Hypergraphics**—an instructional aid that allows students, the teacher, and the computer to interact through the use of a response pad and an interconnection box.

☐ **Computer virus epidemic**—a computer virus is an unauthorized segment of machine-language code that replaces software or data with a copy of itself. Hundreds of viruses exist. Following is a small sample of the most publicized types and the kinds of computers they attack.

- **Pakistani Brain virus** (IBM and compatibles)
  - Replaces original boot sector with itself.
  - Moves original boot sector to another location.
  - Adds seven sectors which contain the remainder of the virus.
  - Flags all modified sectors as unusable to protect itself.
  - Replicates onto all inserted bootable floppies.

- **Scores virus** (Macintosh)
  - Infects any application.
  - Increases application size by 7000 bytes.
  - Seeks out new hosts at 3 ½-minute intervals.
  - Creates notepad and scrapbook files in system folder.
  - Creates invisible Scores and Desktop files.
  - Looks for existence of specific file names for destruction.

- **Israeli virus** (IBM and compatibles)
  - Infects any .COM or .EXE program.
  - Increases program's size by approximately 1800 bytes.
  - Infected programs are modified to become memory resident (TSRs).
  - Programs are infected when they are executed in the infected system.
  - Floppy or hard disks can become infected.
- **nVIR virus** (Macintosh)
  - Appears in many varieties.
  - Each variety has its own activation characteristics.
  - Publication of the source code for this virus is primarily responsible for wide variations.
  - Infection techniques include:
    - Placing nVIR resource in system file.
    - Infected system infects every application executed.
- **Alameda virus** (IBM and compatibles)
  - Replaces original boot sector with itself.
  - Stores original boot sector on first free sector.
  - Infects through software re-boot sequence.
  - Does not flag original boot sector as unusable.
- **Lehigh virus** (IBM and compatibles)
  - Infects COMMAND.COM file.
  - Changes size by approximately 20 bytes.
  - Changes creation date and time.
  - Activates after four infections.
  - Destroys all system data.
- **Datacrime virus**
  - Breaks down the directory section.
  - Makes it impossible for a disk's contents to be read.
- **Logic Bomb virus**—checks for a certain action; for example, to see whether an infected program has been executed a preset number of times.

- ▲ **Network worms**
  - Attack systems that are linked via communication lines.
  - Found in programs that use network connections to spread from system to system.
  - Can behave like a virus or plant a virus.
- ▲ **Time Bomb virus**—checks for a specific date or time (such as Friday the 13th) before executing its objective. Not all time bombs are bad. These can be set to trap someone who is tampering with data in a database.
- ▲ **Trojan Horse**—a programmer's placement of unauthorized instructions in a computer operating system for future use in gaining access to restricted information.
- ▲ **Trap Door**—a segment of code that allows some data to be transmitted to the legitimate operator while other data are transferred to an illegal operator.
- ▲ **Peace virus**—a virus that was created to spread a greeting of world peace and then erase its own instructions, disappearing without a trace.

☐ **Vaccines**—programs that watch for typical things viruses do, halt those actions, and warn the computer operator.

Vaccines should be loaded on the hard drive as a step in the AUTOEXEC.BAT file. As the computer boots, the vaccine will automatically scan for viruses. Some will load into RAM. When the vaccine is in RAM, it will trigger alarms or messages and/or stop the system to tell the user the computer is being infected.

Although many vaccines can be purchased, they are not foolproof. Some viruses can be hidden without the user knowing they exist. When this occurs, the hard drive might have to be reformatted so that nothing is left on it. Vaccines are becoming more sophisticated. The most popular vaccines include *Norton Utilities Antivirus,* and *PC Tools Anti-Virus.*

Legal and ethical issues

Computer crime is any unauthorized act for which knowledge of computer technology is used to commit an offense. Computer crime does not just mean breaking a written law, it also means breaking ethical codes. Prosecution is difficult because of the way the laws are written. Big corporations do not prosecute sometimes because they want the crime "hushed up" so it will not hurt their business. Since corporations do not want to risk losing their stockholders, most computer crimes are settled out of court.

In 1991, a special unit was set up in the U. S. Department of Justice specifically to combat computer crime.

☐ Data spying

Data spies normally "look" at data but do not alter or delete it. In most data spying cases, unauthorized persons learn passwords or otherwise bypass security procedures to gain information from a competitor or for personal gain. They usually access the information by using their telephones and personal computers to link with the system they are breaking into. Industry must go to great lengths to improve password and log-on procedures to prevent this kind of activity.

☐ Hackers

Hackers are computer enthusiasts who break computer security measures designed to prevent unauthorized access to a particular computer system. While few of these individuals actually engage in unauthorized or illegal activities, those few give a bad name to the whole class of gifted experimenters. Rather than wanting to steal, destroy or alter data, a hacker is most often simply challenged by the idea of breaking the codes that protect systems.

☐ Employees or former employees

Personnel who have access to confidential data are subject to temptations to reveal or sell information. Disgruntled or fired employees have been known to sell or give away data, or remove or alter important records from files for revenge. When an employee changes jobs, the knowledge about confidential information acquired in his/her former job may put him/her in an awkward position. The ethical issues involved are complex.

☐ Piracy

Piracy is the unauthorized copying of a computer program. This crime has become "big business" all over the world. Software programmers are no longer putting copy protection on their programs, which makes pirating easier.

☐ Legal issues

The courts have ruled that computer programs are protected under the copyright laws. Programs are easy to copy, making the law difficult to enforce. Some publishers have gone to great lengths to insert special routines or viruses into their software to prevent illegal copying, but no method has been foolproof and programs to break the copy protection routines are as common as the protection routines themselves. Other publishers rely on the honor system, hoping that legitimate users will appreciate the trust which permits them to protect their own interests by making archival backups. The trend among major software companies is to offer unprotected versions of their copyrighted software programs. Some companies sell site licensing contracts to businesses and schools. Some companies enclose a copyright page inside the software package container. They think it is more reasonable to rely on computer operators' ethical code than on laws.

Privacy issues

When business was transacted using handwritten or typed documents, there was a high degree of control over the destination of copies of the information. Now, once data is entered on computers, control is more difficult. The originator of the data, a person who filled out an employment application, for example, has little idea where the information can end up. Confidential data is processed by many organizations.

☐ Credit bureaus

The sole purpose of these organizations is to keep up-to-date records on the financial activities of individuals and businesses. Data are compiled from member or affiliate businesses who subscribe to their services. A problem for the person holding an account is that inaccurate information can be difficult to remove from credit bureau records. Sometimes it is easier for creditors to get information than it is for the individual concerned.

☐ Data banks

There was once a proposal for a huge national data bank in which all the information about every citizen gathered by all state and local agencies would be stored. Using a social security number, any agency could have access to everything known about the person assigned that number. The bank could save huge amounts of money by preventing much duplication of effort and making information more accessible. Several members of Congress saw the plan as a serious threat to privacy, and the data bank was never created. There are, however, many data bases within businesses and state and local governments that hold a great deal of confidential data about persons. Improper access to these databases can be damaging.

☐ Paperless offices

This term implies that all paper documents have been replaced by electronic media. Office personnel may object to a "paperless office" because memos, reports, etc., are no longer confidential. Security and passwords have to be controlled in order for sensitive information to be sent on the system.

- ▲ Encryption is translating data into a secret code for security reasons. People who send E-mail messages to a specific person use encryption. Encryption is used to deter computer crime.

☐ Security methods

- ▲ **Tamper test**—a security program installed to test whether or not the system has been changed.

- **Time bombs**—designed to catch anyone tampering with data; experienced programmers cannot break through because there is no way to know how many bombs have been set.
- **Smoke screen**—fake messages that make the violator believe that he/she is getting important information.
- **Baited trap**—usually placed within the heart of a program where the offender likes to look and tamper with the data; reveals tampering.
- **Execution tracing**—as a program proceeds step-by-step, or module-by-module, it pinpoints each step.

Reliability of systems

Systems are made up of hardware, software, and people. Reliability is a factor in all of these elements.

☐ Hardware

Although computer breakdowns are not as frequent as the public perceives, hardware breakdowns do occur. No matter what kind of a computer is used, there should always be a backup plan so that a hardware problem does not cripple the operation. With mainframes, most organizations have a plan for backup operation of critical systems. The expense of the backup is justified by the importance and timeliness of the data. Minicomputers are smaller than mainframes; however, the minis have the same capabilities as a mainframe. Most companies have some form of backup in case of failure. When failures occur with microcomputers, the work can usually be transferred to another computer.

☐ Software

There is a saying that, "There is no such thing as a program without bugs, only programs for which all the bugs have not yet been discovered." Reputable software companies are responsive to users who have problems and often provide subscription support services. As with storage, frequent backup copying is the best defense against software failure.

☐ Storage media

Magnetic tape and disk packs are still being used on mainframes and minicomputers. Diskettes, or fixed disks, are used for microcomputer storage. Making backup copies of important data should be a regular activity, with the frequency of copying dependent on the difficulty of recovering lost data. When using magnetic tape or disk packs, they should be checked at regular intervals for wear and flaws. When fixed (hard) disks are used, the copies should be on another disk. Floppy disks should be inspected regularly for wear or flaws.

☐ Knowledge

Technical knowledge and formally written, precise, and detailed procedures for all computer operator jobs is important. In large computer shops, several people are trained to do each job, and substitutes can step in when needed. In an office using microcomputers, where only one person is assigned to a job, written procedures can prevent chaos.

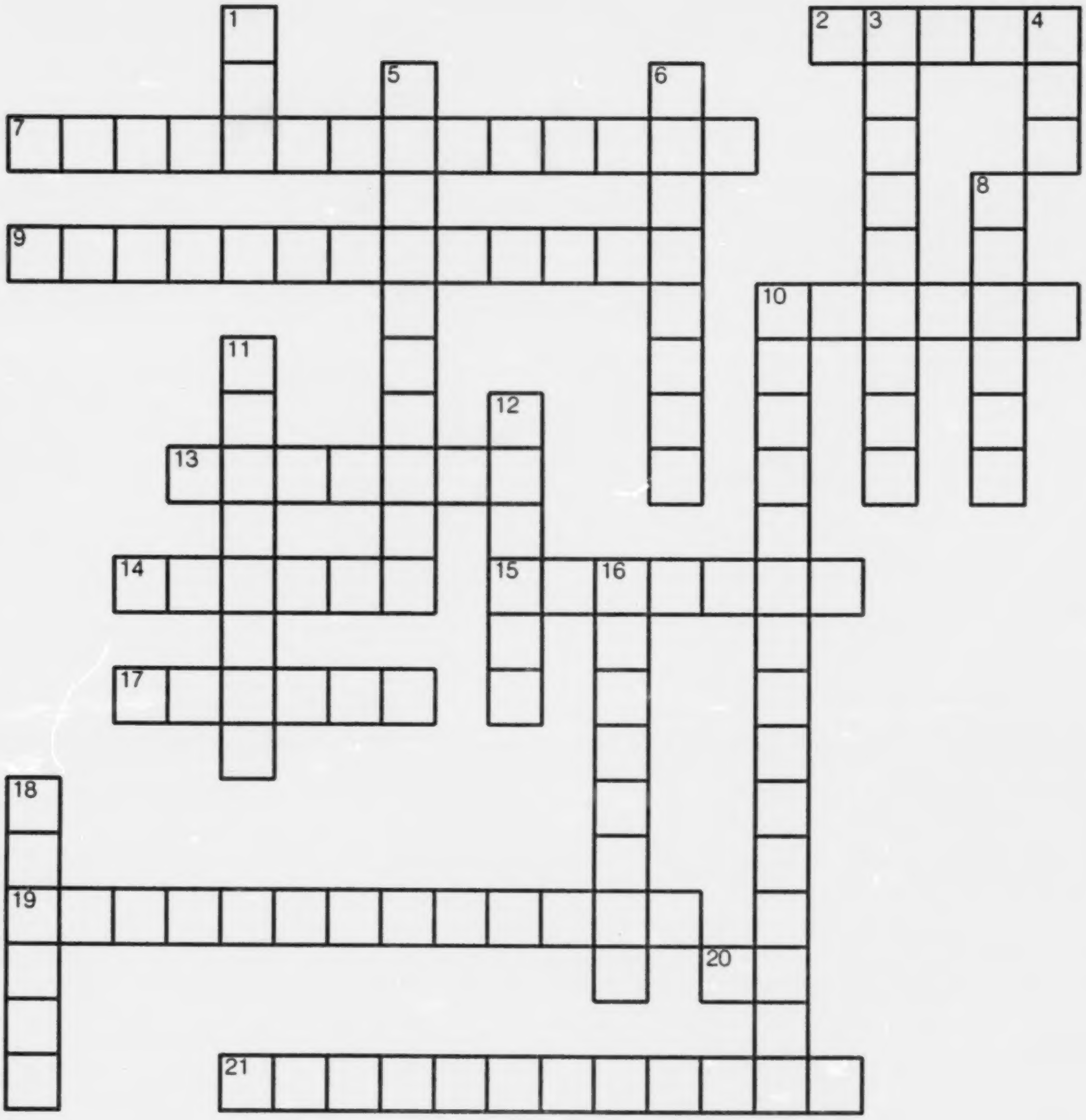
☐ Integrity

Computer professionals at all levels come in contact with private or even secret data. Just as medical personnel and lawyers must preserve the confidentiality of their patients' or clients' records, a data entry operator is expected not to divulge data that passes across his/her desk or terminal. Computer information must remain the property of the employer. After leaving one job for another, even when fired, former employees should not divulge computer information.

☐ Accuracy

The most frequent cause of erroneous data is careless behavior by employees such as inaccurate key entry, failure to follow procedures for verification, leaving a workstation unattended, and overlooking an item of data. Not following specified exiting procedures can cause files to be inaccessible. Improper care of equipment and disks can cause inaccuracies in data.

ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE



ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE CLUES

ACROSS

2. The current compact disks for computers, similar to read-only memory.

7. A virus that replaces the original boot sector with itself and spreads quickly to all bootable disks.

9. Any illegal act for which knowledge of computer technology is used to commit the offense.

10. The unauthorized copying of a computer program.

13. A program that watches for typical things viruses do, halts them, and then warns the computer operator.

14. A virus that leaves no external signs of its presence after infection.

15. A virus that infects any .COM or .EXE program.

17. A virus that infects applications and causes loss of data due to system crashes.

19. An instructional aid used in teaching or training that allows the student, the teacher, and the computer to interact, through the use of a response pad and an interconnection box.

20. A computer science field that attempts to improve computers by giving them some characteristics associated with human intelligence.

21. A program that mimics the decision-making logic of human experts.

DOWN

1. An information-producing system aimed at a particular decision that is to be made.

3. A virus that breaks down the directory section, making it impossible for a disk's contents to be read.

4. Small computer terminals located inside patrol cars.

5. A term describing data that has been translated into a secret code for security reasons.

6. A virus that checks for a specific date or time before executing its objective.

8. A computer enthusiast who breaks computer security measures designed to prevent unauthorized access to a particular computer system.

10. A term that implies that all paper documents have been replaced by electronic media and devices.

11. A segment of code that allows data to be transmitted to the legitimate operator while other data are transferred to an illegal operator.

12. A virus that infects the COMMAND. COM file.

16. The science that deals with robots, their construction, capabilities, and applications.

18. A term used to refer to the standard of moral conduct in computer use.

ACTIVITY 2: ISSUES

Project 1

As our society becomes more dependent on computers and we become a "nameless society," many problems arise. Write a one-page essay about how computer dependency and the nameless society affect you.

Project 2

Write a short paragraph explaining why computer crime is a growing concern. Then, write your views on piracy and prosecuting computer crime.

1. Computer crime

2. Piracy

3. Prosecuting computer crime

Project 3

Define the following and give an example of how each is used in business.

1. Artificial Intelligence

2. Robotics

3. AFIS

4. MDT

5. CD-ROM

6. Hypergraphics

1-3 Social Implications

Activities

ACTIVITY 3: LEGAL AND ETHICAL ISSUES

Project 1

Write a short paragraph describing what you would do if you were in the following situations.

Situation 1

A friend just bought the last copy of a computer game that you have wanted for a long time. You have not been able to afford the game. Your friend tells you that since there is no copy protection on the diskette, he/she will make a copy and give it to you. What would you do?

Situation 2

Your school has just purchased a spreadsheet package for the computer lab. You have a home computer, and one of your classes requires a lot of work done with a spreadsheet. The copy in the lab is not copy protected. Your best friend is the lab assistant and he/she tells you that if you want a copy of the spreadsheet package, you can copy it from one of the terminals. What would you do?

Situation 3

You have a home computer and your brother likes to "play" with the computer. One Saturday afternoon, he tells you that he has broken into someone's computer bank. What would you do?

Project 2

Even though both federal and state laws are enacted to stop computer crime, many of the laws are not enforced. Of the following, research two and explain what the laws are, what they cover, and what, in your opinion, would improve them.

1. *Fair Credit Reporting Act of 1970*
2. *Freedom of Information Act of 1970*
3. *Federal Privacy Act of 1974*
4. *Counterfeit Access Device and Computer Fraud and Abuse Act of 1984*
5. *Small Business Computer and Security Education Act of 1984*
6. *Title 18 U.S. Code*, Section 1029
7. *Foreign Corrupt Practices Act of 1977*
8. *Texas Penal Code*, Section 33.01-33.05
9. Other laws suggested by the instructor

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Project 3

Choose three viruses described in this unit or discussed in class and explain what each does to a computer system.

1.

2.

3.

ACTIVITY 4: PRIVACY ISSUES

Using current articles, write a report on what could be done to improve security in each of the following areas. Use terms discussed in the unit such as E-mail, vaccines, encryption, etc.

1. Credit bureaus
2. Data banks
3. Paperless offices

1-3 Social Implications

Activities

ACTIVITY 5: RELIABILITY OF SYSTEMS

Complete the following.

1. Name at least five types of hardware.

   1)

   2)

   3)

   4)

   5)

2. What can be done to protect software from failure?

3. Name three types of data storage.

   1)

   2)

   3)

4. Write a short paragraph about the relationship between people, confidentiality, and accuracy.

SECTION 2
Word Processing

Essential Elements 75.87 (c)(1)

(1) Concepts and skills related to effective communication and production of business documents. The student shall be provided opportunities to:

A. demonstrate proficiency in business English, spelling, and proofreading;

B. identify and apply correct format for business correspondence, documents and mail merge; and

C. demonstrate processing procedures to steps in document production.

Lesson Plan

Essential Elements: 75.87 (c)(1)(B)
Allocated Time: 10 Hours

Unit Objective: Students will identify and use terminology related to word processing, demonstrate and discuss common word processing functions, and create, spell check, and save documents.

Student Competencies: After completing this unit, the student will be able to:

1. Identify terminology related to word processing.
2. Determine the meaning of word processing, its components, its diversity, and how it relates to the information processing cycle.
3. Discuss and demonstrate use of common word processing functions.
4. Create and spell check documents, use formatting options, and save documents.

Focus: Word processing is one of the most important skills used in processing information. Having a broad-based knowledge of common word processing functions and terminology increases your employability.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or affective domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

2-1 Word Processing Procedures

Content Outline

An overview of word processing

Defining word processing
Software categories
The next-generation word processing packages
Word processing tips

Word processing production features

Common word processing features
File functions
Formatting options
Editing features
Additional production features

Word processing a document

Creating a document
Spell checking a document
Saving a document

Teacher Activities

Teacher Preparation

- ☐ Preview the unit.
- ☐ Review unit objectives.
- ☐ Make instructional analysis.
- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or affective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Suggestions

☐ Produce transparencies or handouts illustrating the features of the software to be used.

☐ Discuss the function keys that are specific to your word processing software program.

☐ The student should be able to load the system and software independently. Each document should be error-free and in correct form. The student should be able to spell check, correct, save, and print a hardcopy.

☐ Make available a hands-on tutorial for individual instruction in the use of the software.

☐ The simulation for this section is *Carol's Cosmetic Cottage*. You can have the students key in the documents for this unit and then complete the simulation after completing *Unit 2: Document Production Procedures*. You can use this as a culmination activity or test for the section or save it for the course closure. The simulation stresses word processing activities. Refer to the special products pages located at the front of the book for additional simulations that can be used if this course is the only office education course taught at your school.

☐ Remember to use the *Test Builder Program* and the related Test Bank.

Activities

Feel free to modify instructions for the activities. For example, you might want the students to key in all answers for each project or perform additional formatting activities such as centering, setting tab stops, or changing fonts.

Competency Test

The competency test is designed to cover all competencies for this unit. Have the students write a rough draft before keying in the document. Approve the document and make any changes that are necessary. Provide the students with instructions for formatting their documents. Include bold, underline, italics, margin settings, etc.

ACTIVITY MATRIX

Activities	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1	X			X	X	
2 Project 1	X	X			X	
Project 2	X	X			X	
3	X	X			X	
4 Project 1	X	X		X	X	
Project 2	X	X		X		
Project 3	X	X		X		
Project 4	X	X		X	X	

COMPETENCY TEST MATRIX

Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
	X	X		X	X	

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Competency Test

Create a document using the following instructions. Give your instructor a handwritten rough draft for approval. Key in the document, spell check, and perform the formatting that is specified by your instructor. Save the document by your first name (or nickname if longer than 8 characters).

Paragraph 1 In your own words, explain word processing and the components needed.

Paragraph 2 In your own words, describe the level of the software you are using and give reasons for classifying it in this category (low-end, mid-range, or high-end).

Paragraph 3 List and describe at least ten production features your word processing software can perform (formatting, editing, special functions, etc.).

Activity Answers

Activity 1

```
                    F O R M A T
                    O
                  M O V E
      H             T     W       E
C U T A N D P A S T E   C O P Y   D
      N             R     R       I
  P A G E B R E A K       D R A F T
      I                   W
  H   N   M       C   D   R   B L O C K
  A   G   A       E   E   A   A
P R O P O R T I O N A L S P A C I N G
  D   A   G   N   T   E       K
  C   R   I   D   E   T       U     I
  O   A   N   E   R   E   O R P H A N
  P   G       N             U       S
  Y   R   P I T C H         L       E
    T A B             T Y P E O V E R
      P                     R       T
      H E A D E R
```

Activity 2 Evaluated to the satisfaction of the instructor.

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Activity 3

Any three to five of the following features may be listed for each of the following categories.

Common word processing features
- Help function
- Spelling checker
- Thesaurus
- Outlining feature
- Conversion routine
- Arithmetic functions
- Sort routine
- Indexing feature
- Search feature
- Search and replace feature
- Text enhancement features
- Automatic page breaks

File functions
- Creating a new file
- Accessing an existing file
- Saving a file
- Closing a file
- Printing a file
- File management
- Exiting the program

Formatting options
- Margins
- Line spacing
- Tab stops
- Paragraph indentations
- Character formats
- Right-justification
- Headers and footers
- Page numbers

Editing features
- Insert and replace (overtype)
- Delete
- Block operations
- Move or cut/paste
- Copy
- Search and replace

Additional production features
- Split screen
- Column mode
- Macros
- Style sheets
- Style and grammar checkers
- Automatic file backup
- Automatic saving

Activity 4

Project 1 Evaluated to the satisfaction of the instructor.

Project 2 The words in bold should match those of the students'; however, additional words may be bold because they may have typos.

Dear Mr. Smith:

You **undoubtely** were surprised to **recieve**, in a **seperate** mailing, the anniversary issue of our news bulletin. We hope you have **becfome familar** with its extraordinary features and brilliant writing and with the **practicle arrangment** that was specifically designed to save you time. **Incidently**, this **complementary** addition was sent to a recommended list of businessmen like you whose jobs make it especially necessary for them to keep up with world affairs in a comparatively easy way.

You **probaly** have had **ocasion** to be embarrassed at times by your lack of knowledge of national or foreign developments and have wished for a pleasant, leisurely way to **accummulate** useful, important facts without the usual **inconvience**. We confidently **guarante** that our bulletin will successfully **fulfil** that desire.

The bulletin **acommodates** its readers by offering an excellent source for the **preceeding** week's news. Its staff includes 19 competent, experienced correspondents who are supervised by a **concientious committe** of prominent editors who **endeaver** to **analize** and summarize **occurences** from every corner of the world.

We hope that the anniversary issue has proved so irresistible to you that you will accept the low-budget subscription offer described in the **accompaning pamplet**. If so, fill out the attached **questionaire** and mail it with your remittance in the **evelop** enclosed for your **convience**.

Yours **truely**,

Project 3

Dear Mr. Smith:

You **undoubtedly** were surprised to **receive**, in a **separate** mailing, the anniversary issue of our news bulletin. We hope you have **become familiar** with its extraordinary features and brilliant writing and with the **practical arrangement** that was specifically designed to save you time. **Incidentally**, this **complimentary** addition was sent to a recommended list of businessmen like you whose jobs make it especially necessary for them to keep up with world affairs in a comparatively easy way.

You **probably** have had **occasion** to be embarrassed at times by your lack of knowledge of national or foreign developments and have wished for a pleasant, leisurely way to **accumulate** useful, important facts without the usual **inconvenience**. We confidently **guarantee** that our bulletin will successfully **fulfill** that desire.

The bulletin **accommodates** its readers by offering an excellent source for the **preceding** week's news. Its staff includes 19 competent, experienced correspondents who are supervised by a **conscientious committee** of prominent editors who **endeavor** to **analyze** and summarize **occurrences** from every corner of the world.

We hope that the anniversary issue has proved so irresistible to you that you will accept the low-budget subscription offer described in the **accompanying pamphlet**. If so, fill out the attached **questionnaire** and mail it with your remittance in the **envelope** enclosed for your **convenience**.

Yours **truly**,

Project 4 The words in italics should match those of the students'; however, additional words may be italics because they may have typos.

(Current date)

Professor Samuel T. White
740 King Street
Ames, IN 50010

Dear Professor White:

Our class in *commercal* law at East Side High School often refers to your textbook as “the book that tells *all*'. *Therfor*, I am turning to you for help.

This is my problem. I have chosen for my term paper the topic “The Meeting of the Minds,” *refering*, of course, to *matuel* agreement in contracts.

This is *mi* question. If I write to a *freind* offering him a position as a bookkeeper in my office at a definite salary, and, if the friend calls me with his *accptance*, does this constitute an agreement?

I think it does, but a fellow student argues that since the offer was made in writing the answer must also be in writing if the minds can really be considered to meet.

Would it be asking *too* much to give me one or two case references to prove my point? I should like to say that I was right!

I hope you will not consider my request *too* much trouble.

Yours truly,

The final printout should look like the letter that follows.

(Current date)

Professor Samuel T. White
740 King Street
Ames, IN 50010

Dear Professor White:

Our class in commercial law at East Side High School often refers to your textbook as "the book that tells all." Therefore, I am turning to you for help.

This is my problem. I have chosen for my term paper the topic "The Meeting of the Minds," referring, of course, to mutual agreement in contracts.

This is my question. If I write to a friend offering him a position as a bookkeeper in my office at a definite salary, and, if the friend calls me with his acceptance, does this constitute an agreement?

I think it does, but a fellow student argues that since the offer was made in writing the answer must also be in writing if the minds can really be considered to meet.

Would it be asking too much to give me one or two case references to prove my point? I should like to say that I was right!

I hope you will not consider my request too much trouble.

Yours truly,

Competency Test Answers

Evaluated to the satisfaction of the instructor; however, the following suggestions may be followed.

The written draft must be submitted to you before the students begin keying in the document. Make any changes or give suggestions that you feel necessary.

Make sure the students do not copy the information directly from the *Unit Overview*. They need to define word processing and the components needed such as keyboard, monitor, computer, printer, mouse, software, etc.

The students must give specific reasons for classifying the software in a particular category. For example, if the software is high-end, they would need to list graphic integration capabilities, etc.

The students can use the information found in their on-line help function to aid them with the production feature descriptions. They should write in their own words and not copy the information.

Document Production Procedures 2-2

Lesson Plan

Essential Elements: 75.87 (c)(1)(A)(B)(C)
Allocated Time: 10 Hours

Unit Objective: Students will demonstrate the document production cycle by creating mailable business documents. This includes classifying business documents, identifying basic parts and formats of the documents, applying proofreading skills, and performing mail merges.

Student Competencies: After completing this unit, the student will be able to:

1. Demonstrate the proper use of the document production cycle.
2. Identify basic parts and formats of business documents.
3. Apply proofreading skills to create mailable business documents.
4. Perform mail merges.

Focus: Keying in information, choosing the appropriate type of document and formats, and proofreading are vital skills for producing mailable documents. Having these skills and using them to save time will allow you to "put your best foot forward" when applying for an entry-level position.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or affective domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

2-2 Document Production Procedures

Content Outline

The document production cycle

The cycle defined

Basic parts and formats of business documents

Memorandums
Business letters
Business reports
Columnar reports

Proofreading documents

Importance of proofreading
Proofreader's marks
Proofreading techniques
Types of common errors
Helpful hints

Mail merge procedures

Creating merge files
Merging data into documents

Teacher Activities

Teacher Preparation

- ☐ Preview the unit.
- ☐ Review unit objectives.
- ☐ Make instructional analysis.
- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or affective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Suggestions

☐ Assemble a classroom display of samples of different kinds of documents that might have been produced by a word processor.

☐ Arrange a competition among individuals or teams to produce assigned documents correctly and in the shortest time.

☐ Have students work in pairs to proofread each other's work.

☐ Prepare instructions specific for your software on mail merge procedures and make copies for the students.

☐ The simulation for this section is *Carol's Cosmetic Cottage*. You may have had your students begin this simulation in the previous unit, and now they need to finish it. If they have not begun the simulation, you can use this as a culmination activity or test for the section or save it for the course closure. The simulation stresses word processing activities. Refer to the special products pages located at the front of this book for additional simulations that can be used if this course is the only office education course taught at your school.

☐ Remember to use the *Test Builder Program* and the related test bank.

Proofreading Marks

Mark	Meaning
∨ ∧	insertion
#	insert space
lc or /	lower case
≡ or cap	capitalize
¶	paragraph
⌢⌣	close up, no space
◯ or sp.	spell it out in full
— or ℓ—	delete
stet or . . .	do not change
]	move right
[	move left
ss	single space
ds	double space
∿	transpose or turn around
//	align
〰〰	bold
- - - - -	italics
← →	center
⊙ or ^	insert period

Matrices

ACTIVITY MATRIX						
Activities	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1	X	X			X	
2	X			X	X	
3 Project 1	X	X		X	X	
Project 2	X	X		X	X	
Project 3	X	X		X	X	
4 Project 1	X	X		X	X	
Project 2	X	X		X	X	
Project 3	X	X		X	X	

COMPETENCY TEST MATRIX						
Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
Project 1	X	X		X	X	X
Project 2	X	X		X	X	
Project 3	X	X			X	
Project 4	X	X		X	X	

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Project 1

Format the following document as a memo to all employees who are on the company tennis team. The memo is coming from Martha Rueben, the captain of the team. Use the current date and an appropriate subject line. Make all necessary spacing calculations to make the table appear balanced. Key in the table on a full sheet and double space it.

NORTHWEST TENNIS CLUB SCHEDULE
January, 19— - March, 19—

Name	Court Surface	Date of Tournament
Greenspring Courts	clay	January 7-11
Seguin Tennis Courts	clay	January 26-30
Midtown Courts	hard	February 16-21
Garnett Tennis Club	grass	March 2-8
Willington Country Club	clay	March 25-29

Project 2

Key the following letter in block style and print the address on a large envelope. Assume you are using letterhead stationery with an envelope that has a printed return address.

Address the following letter to Mrs. Carmen Garza, Premiere Energy Corporation, 6654 West Ashby Place, San Antonio, TX 78228.

Dear Mrs. Garza: I enjoyed talking with you the otehr day and am looking forward to your visit Tuesday, March 3. As I mentioned on the phone, our word processing class meets at 10:30 a.m. in room 112 of the Carter Business Building.

Enclosed is a map of our school and parking facilities. The locations of the classroom and suggested parking are marked for your convenience.

Call me if you need any special equipment for your presentation or if you need any additional information. My office number is 492-8523.

I'm delighted you are coming to share your extensive knwledge of word processing with out class. The students are looking forward to your visit. See you soon.

Sincerely, Martha Stephens

Project 3

Using *Project 2*, explain how the document production cycle relates to the project.

172

Project 4

Using the current date and appropriate letter format, perform a mail merge from the information given below.

(inside address)

Dear (name):

Thank you for your help at the recent Technology conference in San Antonio. Your presentation was well received by all participants.

The thorough overview of (information given at conference) will enable business professionals to utilize their skills fully. Familiarity with the types of information available and the types of possible applications will encourage the implementation of technology. Your presentation is one of the "keys" to the overall success of this conference.

Please let me know if there is anything that I can help you with in the future. I look forward to continuing our mutually beneficial working relationship. Thanks again for your help—I enjoyed working with you.

Sincerely,

Robert Myers
Conference Coordinator, Technology Division

ADDRESSES

Mr. John Mielke
Electro Rent Corporation
12051 Forestgate Drive
Dallas, TX 75243
Computer rental equipment

Mr. Armin B. Sebran
JWP/Mr. Micro
17174 Preston Road
Dallas, TX 75248
Computer sales

Mr. Jack Sheppard
Jack E. Sheppard and Associates
200 West Highway 6, Suite 210
Waco, TX 76712
Instructional technology

Ms. Sandy Peterson
Automated Office Solutions, Inc.
5001 Infomart, 1950 Stemmons Fwy.
Dallas, TX 75207
Software Training

Activity Answers

Activity 1 Evaluated to the satisfaction of the instructor: however, the following can be used as a guideline.

The document production cycle is a sequence of steps that is normally followed in the processing and production of printed information. It is an exact parallel of the information processing cycle, but on a much smaller scale. Many of the same procedures take place, but the document production cycle covers only documents and not the entire information processing cycle.

Input—information is read from source documents which take many forms (handwritten, typed, extracted from several sources, or transferred from another document) and keyed into a computer using word processing software.

Processing—editing, revising, combining, rearranging, formatting, or any combination of actions desired for a document to reach its completed form.

Output—printing one or more copies of the completed document.

Distribution or communication of information—circulating hard or electronic copy of documents through postal, hand delivery, or electronic mail.

Storage—filing document in a database, on a disk, or as a hardcopy. Recipients of copies of the document can also store the copies for later reference.

Retrieval—electronically or manually obtaining a copy of an existing document. The electronic version of a document can be retrieved quickly when a copy of the document is needed.

Activity 2

1. Subject line
2. Date line
3. Enclosure notation
4. Complimentary close
5. Body of the letter
6. Inside address
7. Salutation
8. Reference line
9. Signature line

Format changes evaluated to the satisfaction of the instructor.

Activity 3

Letter with proofreader's marks:

September 4, 19—

Mr. Alber Villa

Club Regency Hotel

5978 Villaret Drive

Memphis, TN 81442

Dear$\overset{\#}{\wedge}$Mr. Villa$\overset{:}{\wedge}$

Please reserve a room for me f$\overset{o}{\wedge}$r October 14, 15, and 16. I would appreciate a room overlooking the Stanton River if possible$\odot$

Plea$\overset{s}{\wedge}$ hold the reservation for a late$\overset{\#}{\wedge}$arrival on the 14th as my flight does not arrive in Memphis until 8$\overset{\#}{\wedge}$p.m.

I will be glad at guarantee the reservation with a deposit.

Please mail me a written confirmation and let me know a if deposit is necessary.

Sincerely,

Gloria Wagner

175

Corrected letter:

September 4, 19—

Mr. Alber Villa
Club Regency Hotel
5978 Villaret Drive
Memphis, TN 81442

Dear Mr. Villa:

Please reserve a room for me for October 14, 15, and 16. I would appreciate a room overlooking the Stanton River if possible.

Please hold the reservation for a late arrival on the 14th as my flight does not arrive in Memphis until 8 p.m.

I will be glad to guarantee the reservation with a deposit.

Please mail me a written confirmation and let me know a if deposit is necessary.

Sincerely,

Gloria Wagner

xx

Project 2

(Current date)

Mr. Carlos Cantu
7326 Forest Grove
San Antonio, TX 78204

Dear Mr. Cantu:

Thank you for your inquiry about our college. As a high school junior you are wise to begin searching for just the right college to meet your needs. We believe Corrigan College is the college for you. Corrigan College is a vital college which places your unique needs and interests as the focus of your educational experience. As a student here, you will develop intellectual self-confidence and expand your leadership abilities.

The campus is located on an attractive, 200-acre tract on the banks of the peaceful Winona River, a 30-minute drive from Verona, a city of 700,000. The buildings were designed by the award-winning architect George Stanton. The grounds show attention to detail and are filled with trees, flowers, and students who are studying or enjoying time with friends. Our faculty ranks among the best in the nation, and they are dedicated to helping you achieve your greatest potential. Small classes with a student-to-faculty ratio of 16:1 promise that your education will be thorough, stimulating, and personal.

About 75 percent of our students live in residence halls on the Corrigan College campus, and this is where lifelong friendships are formed. The college also helps upperclassmen locate convenient housing off campus within easy walking distance.

The goal at Corrigan is to develop the full potential of every student. The flexibility of the curriculum allows students to choose from over 40 majors to fit their personal and intellectual interests. Our highly trained counselors are available to assist you in discovering your aptitudes and focusing your interests on the major of your choice.

The success of our graduates is well known. Over 90 percent of our last three graduating classes have joined the working force and gone on to develop their careers or chosen to attend graduate school.

To receive application materials and learn more about Corrigan College, return the enclosed card. Come join us and become a part of this unique educational experience.

Sincerely,

Kathryn Dunnling
Dean of Admissions

xx

Enclosure

Project 3

TO: William Brakey
Department Chairman

FROM: Joseph Taylor
Instructor

DATE: (current)

SUBJECT: Records Management Class Field Trip

Our records management students have been invited to join a tour of the records facilities at Database Corporation. Karen Thompson, Director of Records Administration, has scheduled the tour for Tuesday, February 10, at 2 p.m. The tour should last approximately two hours.

We will need a district van for transportation to join this tour. We are, therefore, requesting the use of a van. We will need your decision on this request as soon as possible so we can make other arrangements if a van is not available.

Activity 4 Evaluated to the satisfaction of the instructor. All documents should be merged properly.

Competency Test Answers

Project 1 Evaluated to the satisfaction of the instructor. The document should be proofread and the table should be balanced properly on the page.

Project 2 The letter should be similar to the following.

(Current date)

Mrs. Carmen Garza
Premiere Energy Corporation
6654 West Ashby Place
San Antonio, TX 78228

Dear Mrs. Garza:

I enjoyed talking with you the other day and am looking forward to your visit Tuesday, March 3. As I mentioned on the phone, our word processing class meets at 10:30 a.m. in room 112 of the Carter Business Building.

Enclosed is a map of our school and parking facilities. The locations of the classroom and suggested parking are marked for your convenience.

Call me if you need any special equipment for your presentation or any additional information. My office number is 492-8523.

I'm delighted you are coming to share your extensive knowledge of word processing with our class. The students are looking forward to your visit. See you soon.

Sincerely,

Martha Stephens

xx

Project 3 Evaluated to the satisfaction of the instructor.

Project 4 Evaluated to the satisfaction of the instructor. All documents should be merged properly.

SECTION **2**

Word Processing

Unit 1: Word Processing Procedures

Unit Objective: Students will identify and use terminology related to word processing, demonstrate and discuss common word processing functions, and create, spell check, and save documents.

Student Competencies: After completing this unit, the student will be able to:

1. Identify terminology related to word processing.
2. Determine the meaning of word processing, its components, its diversity, and how it relates to the information processing cycle.
3. Discuss and demonstrate use of common word processing functions.
4. Create and spell check documents, use formatting options, and save documents.

Focus: Word processing is one of the most important skills used in processing information. Having a broad-based knowledge of common word processing functions and terminology increases your employability.

Terminology

Backup	A duplicate file.
Block	A selected portion of text that can be operated upon as a unit.
Center	To balance text or headings between margins.
Copy	To reproduce a block within a document or in another document.
Cut and paste	To remove a block from one part of a document and place it in another location.
Delete	To erase characters from a document and close up the vacated space.
Draft	A rough, unedited copy.
Edit	Any additions, deletions, changes, respacing, or moving of text within a document.
Footer	A line of text repeated at the bottom of each page.
Format	Arrangement of information on a page, including margins, spacing, type size, tab stops, etc.
Hardcopy	Written, keyed, or printed copy: a document.
Hanging paragraph	Indenting each line of a paragraph except the first line.
Header (running head)	A line of text that appears at the top of each page.
Hyphenation	A feature that divides words at the end of a line, permitting a more even right margin.
Indent	To enlarge the margin for selected portions of the text.
Insert	To add characters within existing text without replacing characters.

Justify	A formatting option that makes margins straight on both sides.
Margin	The specified amount of space to the left, right, top, and bottom of the text area.
Move	Changing the location of a block of text within a document.
Orphan	The last line of a paragraph that is printed at the top of a page after a page break.
Page break	A manual or automatic command to control when a new page will begin.
Proportional spacing	Space that is adjusted according to the size of each character.
Ruler	A guide displayed on the screen of some word processors to assist in formatting.
Scrolling	Moving a portion of the text on screen into view.
Tab	A preset distance from the left margin to which the cursor can be moved with a single keystroke.
Typeover (overtype)	A condition in which characters are replaced, rather than inserted, when typed into existing text.
Widow	The first line of a paragraph that is printed at the bottom of a page, before a page break.
Word wrap	A feature that sends text to the beginning of the next line when a line is keyed in beyond the margin.

An overview of word processing

- Word processing is the computerized replacement for the typewriters that once sat on everyone's desk. Anything people did with a typewriter, and more, can now be done on a personal computer with word processing software.
  - Word processing is currently the number one application software in North America.
  - Everyone wants to write something; therefore, everyone (the common person) is a typical word processor user.
  - Hardware components required for word processing are a microcomputer, (laptop, notebook, etc.) monitor, keyboard, and printer. A mouse should be used, but is optional.
- Word processing software can be placed into three categories: high-end, mid-range, and low-end.
  - High-end word processing software programs have the most features and are usually the most expensive.
    - *WordPerfect* is the number one word processing software product in today's market.
    - An important feature of today's high-end word processors is text and graphics integration. With it, desktop publishing can be performed without purchasing more expensive software.
    - Tables of contents, merge features, macros, large selection of fonts, and outlining are some of the advanced features found in high-end software.
    - Increasing the number of features in a program does not also make it more difficult to use. Of course, a program with a lot of features is going to take longer to learn, but ease of use has to do with the program itself
  - Mid-range word processing software programs have fewer features and cost less than the high-end software.

- Typical users of mid-range software operate small businesses or work at managerial levels in companies and do not word process everyday.
- Mid-range programs are normally menu-driven, so people who do not use them daily can operate the software with facility.
- This level of software is generally flexible. Programs have many of the same features of high-end software, but do not offer text and graphics integration. They do have extensive spell checking and thesaurus capabilities. Most have a page preview so users can see what the printed document will look like.

- Low-end word processors have basic features and are inexpensive.
  - For basic word processing requirements, the low-end word processing packages are the least expensive solution.
  - Integrated software such as *Microsoft Works* generally meets over 80% of a user's day-to-day word processing needs.
  - The "help" menu is generally a keystroke away and will tell the user what information is required.
  - After learning a low-end word processing program, the user can always move up to the high-end software. For example, if a user is working with *Microsoft Works*, but wants to perform more advanced procedures (indices, tables of contents, macros, desktop publishing, etc.), the user can transfer his/her knowledge to a mid-range or a high-end word processor.

- The next generation word processing packages offer sophisticated features and functions that are tempting many users to abandon their current software packages.

  Major characteristics

  - A graphical user interface (GUI).
  - An editable what-you-see-is-what-you-get (WYSIWYG) presentation that includes type styles and sizes.
  - The ability to integrate text, graphics, and images within a relatively complex multicolumn layout.

- Word processing is similar to typing; however, the word processor should not be used in the same manner as a typewriter. The following are tips for making writing with a word processor faster and easier. Before trying any of the tips, spend some time playing around with sample documents to build speed.
  - **Separate composing from formatting**—when learning the basics of word processing, formatting should be done after the writing.

- **Format on the fly**—formatting and composing can be confusing to the beginner, but after learning the fundamentals, formatting can be performed as one composes.

- **Cut and paste**—efficient word processing includes quickly entering thoughts as they occur and then editing and arranging the text using the cut and paste functions.

- **Check grammar and style**—after the information is keyed in. Software can be purchased to help check grammar and style.

- **Check spelling**—after the information is keyed in because most word processors have spell checkers. This function will not take the place of proofreading because the spell checker is not 100% accurate.

- **Write in shorthand**—use abbreviations whenever possible, especially if a specific word or phrase is repeated. After completing the document, use the search and replace function to replace the abbreviations with the entire word or phrase.

- **Skip around**—a document does not need to be composed line-by-line or thought-by-thought. Jump around in the document as ideas and thoughts occur.

- **Leave room for thoughts**—although words, phrases, and paragraphs can be inserted quickly and easily, using several returns in the document where additional information will be placed helps the user because the current words will not distract him/her. After inserting the information, the extra returns can simply be deleted.

- **Recycle words**—use words and phrases from other files. This method saves time. Entire documents can be modified at any time to fit specific situations.

- **Insert standard text quickly**—creating macros and glossary entries for commonly used words and phrases will save time and make the user much more efficient. Using one or two keystrokes is faster than keying in the entire word or phrase.

- **Window work**—working between two documents helps the user recall specific ideas or research written previously. Information can also be transferred between the windows.

- **Share ideas**—several people may work collectively on a report or other business document. If the computers are networked or the users have an E-mail system, ideas can be sent and received quickly and imported into the word processor.

- **Undo to see possibilities**—(this works on the Macintosh but not on all MS-DOS software.) Use the toggle switch to change a sentence and then "undo" the process. The user can see and decide the best way to phrase a sentence.

- **Examine word frequency**—one way to eliminate repetitious writing is to note how often a particular word or phrase has been used. Some software has an automatic search and replace function that will display the number of changes made.
- **Eliminate weak writing**—manual search and replace allows the user to change some but not all occurrences of a word or phrase.

Word processing production features

- Common word processing features
    - **Help function**—available by topic, function, or level, assists the user with the program operation. When the user gets "stuck" and does not know what to do next, on-screen help is available in a keystroke or at the click of a mouse button.
    - **Spelling checker**—flags words not found in the dictionary. Sometimes it offers additional help by suggesting one or more possible substitutes. Words may be added to the dictionary to allow for specialized vocabularies or frequently used names.
    - **Thesaurus**—provides the user with synonyms. A list of synonyms is displayed by pointing with the cursor to a word in the text and accessing the Thesaurus command. Words can be replaced or left unchanged.
    - **Outlining feature**—enables writers to organize information. This feature permits the user to develop an outline and then expand it into a complete document by taking headings or key words from paragraphs or sub-paragraphs and forming an outline.
    - **Conversion routine**—allows transporting text for access by other software packages.
    - **Arithmetic functions**—allow mathematical calculations such as addition, subtraction, multiplication, and division to be performed.
    - **Sort routine**—permits arranging terms or sections of text into a desired sequence. This is useful for alphabetizing lists of names, glossary terms, or appendix items.
    - **Indexing feature**—allows entries, including page numbers, to be identified that will later be organized into an index for the document. It is intended for use with long documents.
    - **Search feature**—allows the user to search a document for a specific word, phrase, or format.

- **Search and replace feature**—allows the user to search a document for a specific word, phrase, or format and replace it with another.
- **Text enhancement features**—include those used for centering or indenting a block of text or using boldface, italics, and underline for emphasis. Some other text enhancement features include headers and footers, use of various fonts, and page numbering.
- **Automatic page breaks**—generally keep paragraphs together to eliminate orphans and widows.

- File functions
    - **Creating a new file**—used when a new document is composed or entered.
    - **Accessing an existing file**—used when retrieving an existing file for modification or printing a hardcopy.
    - **Saving a file**—used before closing a file or exiting the program or during the entering process so data are not lost.
    - **Closing a file**—used when the user is finished with the file.
    - **Printing a file**—used to relay specific print options from the screen display to the printer; produces a hardcopy.
    - **File management**—used to delete, rename, or print one or several files at the same time without leaving the program.
    - **Exiting the program**—used to leave the program for an extended time period, such as at the end of a day.

- Formatting options
    - **Margins**—left, right, top, or bottom margins can be set for the entire document or paragraph by paragraph.
    - **Line spacing**—allows the user to specify the spacing between lines.
    - **Tab stops**—used to indent text and align columns and lists. The number and types of tab stops available varies with the software program. Left, right, center, and decimal tabs can be set in most programs.
    - **Paragraph indentations**—allows the first line to be indented. The paragraph can be formatted so that all lines of the paragraph are indented from the left margin, the left and right margin, or centered.

- **Character formats**—include boldface, centered, italic, underline, double underline, font types, font sizes, subscripts, superscripts, and strike through. Character formats can be used in combinations and can be attached to a character, word, paragraph, block of text, or to the entire document.
- **Right-justification**—space is added between the words in lines of text so the right margin is even.
- **Headers and footers**—printed at the top and bottom of the page. When working with a multiple-page report, special information might be desired at the top and/or bottom of each page.
- **Page numbers**—some programs allow the operator to print page numbers on multiple documents. There are several options for their location, such as top or bottom of the page, left, right, center, or on even or odd pages.

☐ Editing features

- **Insert and replace (overtype)**—add or replace text in existing documents. Using the insert mode allows characters to the right of new text to move to make room for it. Using the replace (overtype) mode, the text does not move, and the new text replaces the old.
- **Delete**—removes unwanted text from the existing document.
- **Block operations**—selects a section of text to which users can attach formatting options or perform other functions such as deleting or copying.
- **Move or cut/paste**—used when words, sentences, paragraphs, and entire pages of text are out of sequence. User identifies text that is to be moved (cut and lifted) from it present location and inserted (paste) into a new location.
- **Copy**—similar to cut-and-paste operation; however, the original version of the text is not affected by the changes.
- **Search and replace**—used to locate specific text or format and replace it with other text or format.

☐ Additional production features

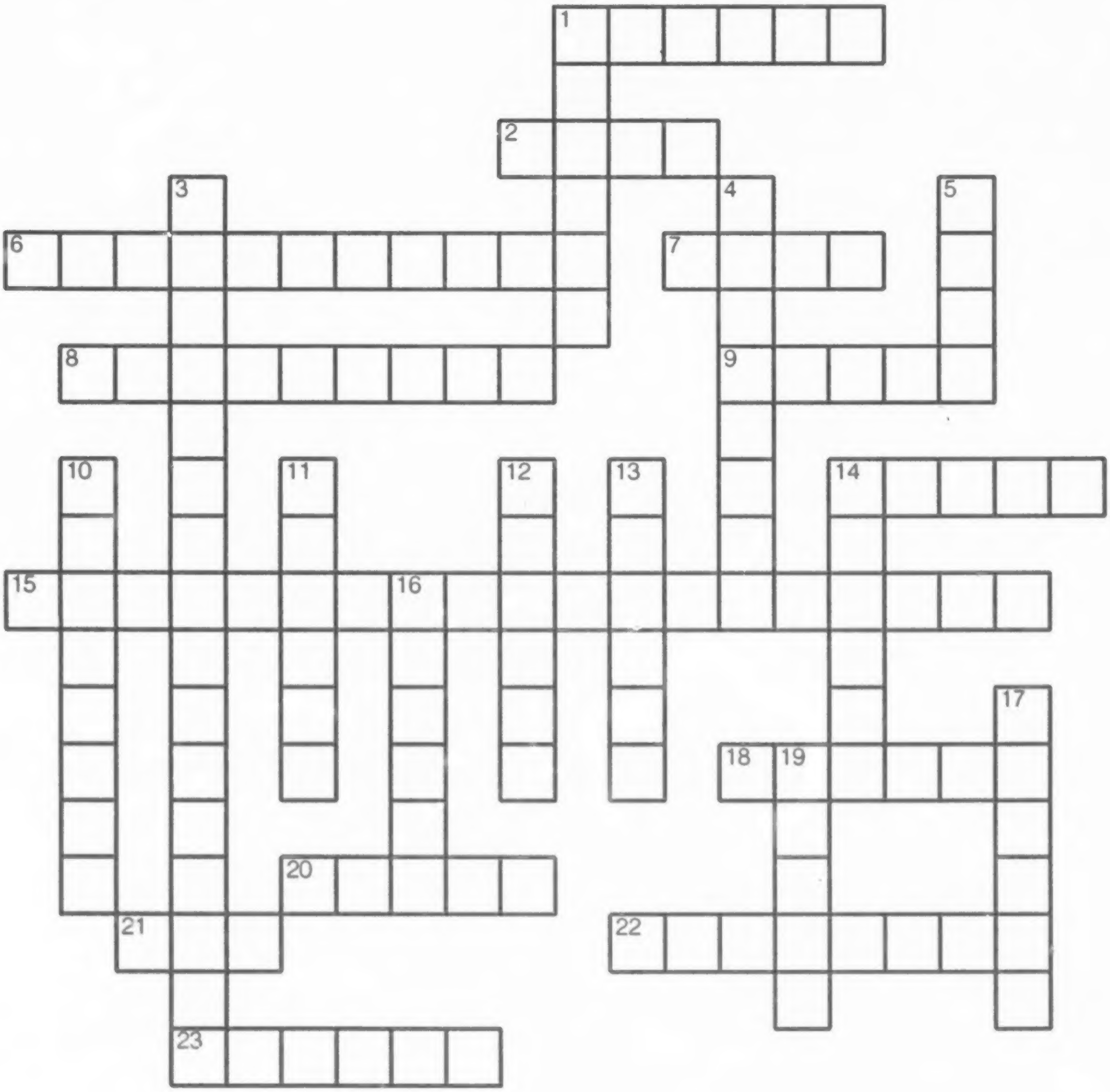
- **Split screen**—allows the display of two or more sections of the same file or separate files on the screen at the same time so they can be compared, moved, or copied.
- **Column mode**—allows work with columns as in a newsletter. The number of columns available will vary with the software.
- **Macros**—short cuts used to record a series of keystrokes and then play back the series with a specific key code.

- **Style sheets**—allow the user to create formats that can be saved to eliminate repetitive formatting.
- **Style and grammar checkers**—used to check text for style, grammar, and usage.
- **Automatic file backup**—used to save the most recent version of a document in the original file, and move the previously saved version to a backup file where it can be retrieved if necessary.
- **Automatic saving**—used to save files automatically at specified intervals. It prevents losing files of new or revised documents unintentionally when the user quits the program or in case of power failure.

Word processing a document

- Creating a document
  - When beginning a document, the screen is usually blank with the cursor flashing in the upper left-hand corner of the screen.
  - Begin keying in the document or information that is to be processed.
  - Formatting can be performed as the user is keying in the document or after all information is keyed in.
- Spell checking a document
  - After the document or information has been entered, invoking a special function key, series of keystrokes, or command from a menu can begin the spell checking process.
  - If a word is incorrectly spelled or if the program's dictionary does not contain a word, the word will be flagged so that the user can change the word to the correct spelling. If the dictionary does not contain the word, the user can just tell the program to "ignore" the word and continue with the spell check process.
  - The spell checker will catch most of the spelling mistakes; however, synonyms and transpositions such as "form" and "from" will not be flagged by the program. Proofreading must still be performed each time a document is produced.
- Saving a document
  - A document or information can be saved on the hard drive, a "stiffy" disk, or a floppy disk.
  - A special function key, series of keystrokes, or command from a menu can be invoked to save the document.

ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE



ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE CLUES

ACROSS

1. Arrangement of information on a page, including margins, spacing, type size, tab stops, etc.

2. Changing the location of a block of text within a document.

6. To remove a block from one part of a document and place it in another location.

7. To reproduce a block within a document or in another document.

8. A manual or automatic command to control when a new page will begin.

9. A rough, unedited copy.

14. A selected portion of text that can be operated upon as a unit.

15. Space that is adjusted according to the size of each character.

18. The last line of a paragraph that is printed at the top of a page after a page break.

20. The measure of type size.

21. A preset distance from the left margin to which the cursor can be moved with a single keystroke.

22. A condition in which characters are replaced, rather than inserted, when keyed into existing text.

23. A line of text that appears at the top of each page.

DOWN

1. A line of text repeated at the bottom of each page.

3. Indenting each line of a paragraph except the first line.

4. A feature that sends text to the beginning of the next line when a line is keyed in beyond the margin.

5. Any additions, deletions, changes, respacing, or moving of text within a document.

10. Written, keyed, or printed copy: a document.

11. The specified amount of space to the left, right, top, and bottom of the text area.

12. To balance text or headings between margins.

13. To erase characters from a document and close up the vacated space.

14. A duplicate file.

16. To enlarge the margin for selected portions of the text.

17. To add characters within existing text without replacing characters.

19. A guide displayed on the screen of some word processors to assist in formatting.

ACTIVITY 2: WORD PROCESSING OVERVIEW

Project 1

Using the word processing software that you have in your classroom, decide whether it is high-end, mid-range, or low-end and explain why you have placed the software in that category.

Project 2

Using the tips given in the *Unit Overview*, list and explain at least six of them and explain why you think these methods are important to you.

2-1 Word Processing Procedures

Activities

ACTIVITY 3: WORD PROCESSING FUNCTIONS

List the production features of the word processing software with which you are working. List three to five features for each of the following categories.

1. Common word processing features

2. File functions

3. Formatting options

4. Editing features

5. Additional production features

ACTIVITY 4: WORD PROCESSING A DOCUMENT

Project 1

Key in the following document exactly as it appears. Save the document as LETTER1. Print a copy of the document.

Dear Mr. Smith: You undoubtely were surprised to recieve, in a seperate mailing, the anniversary issue of our news bulletin. We hope you have becfome familar with its extraordinary features and brilliant writing and with the practicle arrangment that was specifically designed to save you time. Incidently, this complementary addition was sent to a recommended list of businessmen like you whose jobs make it especially necessary for them to keep up with world affairs in a comparatively easy way.

You probaly have had ocasion to be embarrassed at times by your lack of knowledge of national or foreign developments and have wished for a pleasant, leisurely way to accummulate useful, important facts without the usual inconvience. We confidently guarante that our bulletin will successfully fulfil that desire.

The bulletin acommodates its readers by offering an excellent source for the preceeding week's new. Its staff includes 19 competent, experienced correspondents who are supervised by a concientious committe of prominent editors who endeaver to analize and summarize occurences from every corner of the world.

We hope that the anniversary issue has proved so irresistible to you that you will accept the low-budget subscription offer described in the accompaning pamplet. If so, fill out the attached questionaire and mail it with your remittance in the evelop enclosed for your convience.

Yours truely,

Project 2

Retrieve the document, *LETTER1*, entered in *Project 1*. Before performing a spell check, use the bold format to indicate all the words that you know are misspelled including your typos and use the italic format to indicate all the words that you think might be misspelled. Print a copy and save the document as LETTER2.

Project 3

Retrieve the document, *LETTER2*, you created in *Project 2*. Perform a spell check, justify all paragraphs, single space the letter, and then print a copy of the letter. Save the document as LETTER3.

Project 4

Perform each of the following steps to the letter below.

1. Key in the document exactly as it appears and save it as LETTER4.
2. Print a copy of the document.
3. Italicize all misspelled words including your typos.
4. Underline all words you think may be misspelled.
5. Justify all paragraphs and save this document as LETTER5.
6. Print a copy of the document.
7. Spell check the document.
8. Remove all italics and underlines.
9. Save the document as LETTER6 and then print a copy of the document.

(Current date)

Professor Samuel T. White
740 King Street
Ames, IN 50010

Dear Professor White:

Our class in commercal law at East Side High School often refers to your textbook as "the book that tells all'. Therfor, I am turning to you for help.

This is my problem. I have chosen for my term paper the topic "The Meeting of the Minds," refering, of course, to matuel agreement in contracts.

This is mi question. If I write to a freind offering him a position as a bookkeeper in my office at a definite salary, and, if the friend telephone his accptance, does this constitute an agreement?

I think it does, but a fellow student argues that since the offer was made in writing the answer must also be in writing if the minds can really be considered to meet.

Would it be asking to much to give me one or two case references to prove my point? I should like to say that I was right!

I hope you will not consider my request to much trouble.

Yours truly,

SECTION 2

Word Processing

Unit 2: Document Production Procedures

Unit Objective: Students will demonstrate the document production cycle by creating mailable business documents. This includes classifying business documents, identifying basic parts and formats of the documents, applying proofreading skills, and performing mail merges.

Student Competencies: After completing this unit, the student will be able to:

1. Demonstrate the proper use of the document production cycle.
2. Identify basic parts and formats of business documents.
3. Apply proofreading skills to create mailable business documents.
4. Perform mail merges.

Focus: Keying in information, choosing the appropriate type of document and formats, and proofreading are vital skills for producing mailable documents. Having these skills and using them to save time will allow you to "put your best foot forward" when applying for entry-level position.

Document Production Procedures 2-2

Unit Overview

The document production cycle

- The document production cycle is a sequence of steps that is normally followed in the processing and production of printed information. It is an exact parallel of the information processing cycle, but on a much smaller scale. Many of the same procedures take place, but the document production cycle covers only documents and not the entire information processing cycle.
    - **Input**—information is read from source documents which take many forms (handwritten, typed, extracted from several sources, or transferred from another document) and keyed into a computer using word processing software.
    - **Processing**—editing, revising, combining, rearranging, formatting, or any combination of actions desired for a document to reach its completed form.
    - **Output**—printing one or more copies of the completed document.
    - **Distribution or communication of information**—circulating hard or electronic copy of documents through postal, hand delivery, or electronic mail.
    - **Storage**—filing document in a database, on a disk, or as a hardcopy. Recipients of copies of the document can also store the copies for later reference.
    - **Retrieval**—electronically or manually obtaining a copy of an existing document. The electronic version of a document can be retrieved quickly when a copy of the document is needed.

Basic parts and formats of business documents

- Memorandums
    - Parts of a memorandum
        - **Dateline**—contains the current date and is designated by the guide word DATE.
        - **Recipient**—the person or persons who will receive the memo and is designated by the guide word TO.

- **Sender**—the person who prepared the memo and is designated by the guide word FROM.
- **Subject line**—identifies the purpose of the memo and is designated by the guide word SUBJECT.
- **Body**—the message of the memo.
- **Reference initials**—identify the person who initiated the memo and the person who keyed in the memo. Some offices identify only the person who keyed in the memo.
- **Enclosure** or **attachment notation**—used if something is to accompany the memo.
- **Carbon copy** or **photocopy notation**—indicates who else is to receive a copy of the memo.

▲ Memorandum format

- The top margin on plain paper should be 1.5". On letterhead, begin 1" below the last line of the letterhead.
- The left margin on a preprinted form should be set even with the guide words. The right margin should be equal in space to the left margin.
- On letterhead or plain paper, use 1.25" or 1" margins depending on the length of the memo. The guide words should be keyed in at the left margin in all caps and double-spaced. A tab should be set 1" in from the left margin to align heading information that is keyed in after each guide word.
- An alternative memo form can be used to save time. The guide words, DATE, FROM, and SUBJECT can be omitted, but the guide word TO must remain. The information normally keyed in after the guide words are keyed in at the left margin.
- The body of the memo begins on the third line below the last guide word. The body usually is keyed in block style. It is single-spaced with a double-space between paragraphs.
- The reference initials are keyed in at the left margin on the second line below the last paragraph. A colon or a diagonal line separates the two sets of initials.

☐ Business letters

▲ Basic parts and placement

- **Letterhead**—a printed heading containing the name and address of the company.

- **Dateline**—tells the person receiving the letter when the letter was entered. It is located approximately four lines below the letterhead; however, when the letter is short, the spacing is adjusted accordingly.

- **Inside address**—shows the name, title, and address of the person or company to whom the letter is written. It is keyed in leaving 4 to 12 lines between the date and the salutation depending on the length of the letter.

- **Salutation**—addresses a person or a company. Use the person's name if at all possible. When addressing a business, use Ladies and Gentlemen. It is placed on the second line below the inside address.

- **Body**—tells the message. It begins one blank line below the salutation. The body is single-spaced with one blank line left between paragraphs.

- **Complimentary close**—ends the letter in a friendly manner. It is keyed in one blank line below the last line of the body of the letter.

- **Signature line**—includes the name and title of the writer of the letter. It is keyed in four lines below the complimentary close.

- **Reference line**—identifies the originator and the person who keyed in the letter. The initials are placed one blank line below the signature line at the left margin.

- Special parts of letters

  - **Addressee notation**—shows how the letter is to be handled when received, such as PERSONAL or CONFIDENTIAL. The notation is placed before the inside address and followed by one blank line. It is usually keyed in all caps at the left margin. The same notation is included on the envelope.

  - **Mailing notation**—shows the purchase of special postal services and provides directions for sorting and recording mail, such as CERTIFIED or REGISTERED MAIL. This notation is placed one blank line after the date and keyed in all caps at the left margin. It is also included on the envelope.

  - **Attention line**—used when a letter is addressed to a company but directed to a person or department. It is placed on the second line below the inside address at the left margin or may be keyed in below the company name on both the envelope and the letter. The attention line can be keyed in all caps or underlined in upper- or lower-case letters.

  - **Subject line**—used as a title to the body of the letter. It is keyed in one blank line after the salutation at the left margin or centered. This line can be keyed in all caps or in upper- and lower-case letters. Ref. or Re. may be used instead of the word SUBJECT.

- **Enclosure notation**—used if additional materials are included with the letter. It is keyed in one blank line below the reference initials. The word "enclosure" can be abbreviated. A number should be placed after Enc. if there is more than one enclosure.

- **Carbon copy (cc:)** or **photocopy (pc:) notation**—used to show other persons to whom copies of the letter have been sent. This notation is keyed in one blank line below the reference initials or enclosure notations. The name of the person receiving the copy should be keyed in after the notation.

▲ Standard margins

- The side margins for long letters are one inch.
- The side margins for medium length letters are 1.5 inches.
- The side margins for short letters are two inches.
- The bottom margins on all pages should be at least one inch.

▲ Letter styles

- **Block style** has all lines beginning at the left margin. This style is one of the more popular letter styles in business because it is easy to set up, which saves time.

- **Modified block style** has all lines beginning at the left margin except for the dateline, the complimentary close, and the signature line which begin at the center of the page, and the first line of paragraphs, which are indented five spaces. This style is not used often because it is difficult to do on computers.

- **AMS simplified style** is sponsored by the Administrative Management Society. The format characteristics include full-block to the left, the inside address begins on the fourth line below the date, no salutation, the subject line is in all capital letters two blank lines below the address, and the body of the letter begins two blank lines below the subject line.

▲ Punctuation styles

- Open punctuation requires less time to enter. Punctuation is not used after the salutation and the complimentary close.

- Mixed punctuation is most commonly used in business. A colon is placed after the salutation and a comma is placed after the complimentary close.

☐ Business reports

- ▲ The first step when preparing to write a report is to determine the problem or purpose of the report. Decide upon the range of the topic and how much information to include. Remember to restrict what is to be included. Consider who will be reading the report and write to that audience. Collect facts and data from sources such as library research, interviews, surveys, other reports, etc.

- ▲ Establish facts and ideas including an introduction, body, and conclusion/recommendations. Determine the method of approach appropriate for the topic. Visual aids, which help communicate information, include bar graphs, pie charts, statistical tables, maps, illustrations, etc.

- ▲ Use an outline as an organizational guide. Using the outline helps the writer compose in a clear, concise, and objective writing style.

- ▲ If the report is lengthy, prepare a table of contents that lists major headings/chapters and their beginning page numbers.

- ▲ Document all the sources of information referred to in the report.

  - Footnotes are references printed at the bottom of a page referring to specific portions of directly or indirectly quoted text on that same page.

  - Endnotes are references listed at the end of the report referring to specific portions of directly or indirectly quoted text. Endnotes take the place of footnotes.

  - A bibliography is a complete listing of reference sources used to prepare a report.

- ▲ Types of reports

  - **Informal reports** are short reports in various forms. A memorandum is a short report used for interoffice communication. A letter is a short report written to someone outside the company.

  - **Formal reports** are usually longer than informal reports. The more parts included in a report, the more formal the report.

    Basic parts of a formal report

    - The title page includes the author's name, date, title of the report, and sometimes the identification of the reader.

    - The table of contents lists the headings and their beginning page numbers as well as the parts of the report which appear before and after the body.

    - The body presents facts and information and discusses the objective/problem.

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- The bibliography lists the references or sources used to prepare the report.

Supplementary parts of a formal report

- The title fly lists only the title of the report.
- The letter of transmittal is a message from the author to the reader.
- The letter of authorization is the message that assigns responsibility for writing the report to the author.
- The synopsis is a summary of the report.
- Visual aids are illustrations, graphs, or charts that help communicate information visually.
- The appendix provides additional (but not vital) information at the end of a report.

☐ Columnar reports

▲ Tables and charts parts and placement

- The **margins** depend upon the table. The entire table may be centered vertically and horizontally on the page.
- The **title** is centered and keyed in all caps. Leave one blank line between the main title and subtitle if there is one.
- The **column headings** begin two blank lines down from the title to the body of the table. The headings are centered horizontally, keyed in upper- and lower-case letters, and underlined.
- The **body** of the table begins one blank line down from the column headings. The body may be single- or double-spaced depending on the length of the table.

Proofreading documents

☐ Proofreading is the examination of printed text to mark errors which need correction. In today's automated office, word processing has led to the ability to produce more documents, and more documents increase the chances of mistakes. Proofreader's marks indicate needed corrections. Using standard proofreader's marks allows anyone who knows the marks to make the corrections.

- ☐ Proofreading techniques
    - ▲ Evaluating overall appearance
        - Begin by looking at the overall appearance of a document for neatness as well as correct placement and sequence of parts.
        - Proofread text while paper is still in the typewriter or, if a word processor is used, proofread and make corrections **before** printing the document.
    - ▲ Evaluating mechanics and grammar
        - Check for correct spelling; use a dictionary or spell checker. Pay attention to the spelling of names and locations. Remember not to rely completely on the spell checker, because it does not catch synonyms and some transpositions.
        - Locate typographical errors.
        - Look for correct word division. Use a word division manual.
        - Check for accurate punctuation and capitalization.
        - Evaluate grammar usage. Use a reference manual or grammar checker to help you determine correct subject-verb agreement, pronoun and antecedent agreement, incomplete sentences, and correct word choice.
    - ▲ Evaluating content
        - Read the document for clarity of meaning.
        - Check to see if all necessary information is included and for accuracy of numbers and technical material.
    - ▲ Reading hints
        - Read much slower than the normal reading rate.
        - When reading from a screen, read the document once and then scroll backward. Check for details.
        - The most common places to find errors are in headings, beginnings or endings of lines, the bottom of the page, long words, proper nouns, and numbers.
        - Proofread for one kind of error at a time: mechanical, format, or content.
        - Proofread difficult material and names letter by letter. Compare to the source document.

    - Read aloud or move lips to form words to help improve concentration.

- Types of common errors
  - Transposition
    - Check for words that have been transposed.
    - Search for transposed letters within words.
    - Double check for transposition of numbers.
  - Substitution
    - Look for the substitution of one small word for another.
    - Reading for meaning helps here.
  - Omission
    - Check for the omission of letters, words, and lines.
    - Pay attention to the omission of one of a pair of doubled letters.

- Helpful Hints
  - Use your finger or a pen as a guide when reading.
  - Read with another person. One person reads from the original draft, while the other checks the final copy.
  - On hardcopy, use proofreader's marks and make notes in the margins.

Mail merge procedures

- Creating merge files
  - The first file to create is similar to a template that has the formatting completed. This file is called the main file and includes codes for inserting the variables.
  - The next file to be created is a data file that contains names, addresses and other variables.
    - Data can be keyed in through the keyboard, scanner, or other input device.

    - Data also can be imported from other application programs such as a database or spreadsheet.

☐ Merging data into documents

- ▲ The main file and the data file must be connected.
- ▲ A line of code (variable sequence) tells the program what fields are needed and what sequence they will appear.
- ▲ When two files are merged, the main file contains variables that the data file contains. The data in the data file are inserted into the appropriate places in the main document according to the codes used.
- ▲ Uses include:
    - Data can be merged into form letters or other documents to make this type of letter more personal.
    - Data can be merged onto labels which helps with large mail-outs. Most database software will sort alphabetically or by ZIP Code and then the data can be transferred.
    - Data can be merged directly onto envelopes. Most laser printers have specific settings that allow envelopes to be printed; however, the envelopes generally must be manually fed into the printer.

ACTIVITY 1: THE DOCUMENT PRODUCTION CYCLE

Key in a paragraph, explaining the document production cycle.

ACTIVITY 2: BASIC PARTS AND FORMATS OF BUSINESS DOCUMENTS

Using the spaces at the right, identify the parts of the business letter below. On the next page, identify the letter parts by number *in the correct order* for each letter style listed. Write the format changes required for the letter style in the space entitled "Changes."

BUSINESS PROFESSIONALS OF AMERICA
NATIONAL LEADERSHIP CONFERENCE ______________ 1.

October 26, 1988 ______________ 2.

Enclosure ______________ 3.

Sincerely, ______________ 4.

The national leadership conference for the Business Professionals of America is planned for April 25-30, 19. The conference will be held in Louisville, Kentucky. ______________ 5.

Reservations for this year's conference must be made as soon as possible. Please return the enclosed card if you would like the planning committee to make reservations for you. An itinerary of convention activities and your reservation information will then be mailed to you immediately. Thank you for your cooperation in responding promptly.

Jean Johnson
1514 Center Street
Dallas, Texas 76544 ______________ 6.

Dear Ms. Johnson ______________ 7.

cl ______________ 8.

Tom Brown
President ______________ 9.

AMS
Simplified ______________________________

Changes: ______________________________

Block ______________________________

Changes: ______________________________

Modified
Block ______________________________

Changes: ______________________________

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ACTIVITY 3: PROOFREADING SKILLS

Project 1

Use proofreader's marks to indicate corrections to the following letter. Key in the letter in a mailable format and assume the memo is on letterhead.

September 4, 19—

Mr. Alber Villa

Club Regency Hotel

5978 Villaret Drive

DearMr. Villa;

Please reserve a room for me fer October 14, 15, and 16. I would appreciate a room overlooking the Stanton River if possible

Pleae hold the reservation for a latearrival on the 14th as my flight does not arrive in Memphis until 8p.m.

I will be glad ot guarantee the reservation with a deposit.

Please mail me a written confirmation, and let me know a if deposit is necessary.

Sincerely,

Gloria Wagner

Project 2

From the following information, produce a mailable letter using the modified block format. Use today's date and assume you are using letterhead stationery.

The following letter is sent to: Mr. Carlos Cantu, 7326 Forest Grove, San Antonio, TX 78204

Dear Mr. Cantu:

Thank you for your inquiry about our college. As a high school junior you are wise to begin searching for just the right college to meet your needs. We believe Corrigan College is the college for you. Corrigan College is a vital college which places your unique needs and interests as the focus of your educational experience. As a student here, you will develop intellectual self-confidence and expand your leadership abilities.

The campus is located on an attractive, 200-acre tract on the banks of the peaceful Winona River, a 30-minute drive from Verona, a city of 700,000. The buildings were designed by the award-winning architect George Stanton. The grounds show attention to detail and are filled with trees, flowers, and students who are studying or enjoying time with friends. Our faculty ranks among the best in the nation, and they are dedicated to helping you achieve your greatest potential. Small classes wth a student-to-faculty ratio of 16:1 promise that your education will be thorough, stimulating, and personal.

About 75 percent of our students live in residence halls on the Corrigan College campus, and this is where lifelong friendships are formed. The college also helps upperclassmen locate convenient housing off campus but which is within easy walking distance.

The goal at Corrigan is to develop the full potential of every student. The flexibility of the curriculum allows students to choose from over 40 majors to fit their personal and intellectual interests. Our highly trained counselors are available to assist you in discovering your aptitudes and focusing your interests on the major of your choice.

The success of our graduates is well known. Over 90 percent of our last three graduating classes have joined the working force and gone on to develop their careers or chosen to attend graduate school.

To receive application materials and learn more about Corrigan College, return the enclosed card. Come join us and become a part of this unique educational experience.

Sincerely,

Kathryn Dunnling

Dean of Admissions

Enclosure

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Project 3

Using the following information, key in the memorandum using an acceptable business format. Use today's date and remember to proofread the document.

TO:

William Brakey

Department Chairman

FROM: Joseph Taylor

Instructor

DATE: (current)

SUBJECT: Records Management Class Field Trip

Our records management students have been invited to join a tour of the records facilities at Database Corporation. Karen Thompson, Director of Records Administration, has scheduled the tour for Tuesday, February 10, at 2 p.m. The tour should last approximately two hours.

We will need a district van for transportation to join this tour. We are, therefore, requesting the use of a van. We will need your decision on this request as soon as possible so we can make other arrangements if a van is not available.

ACTIVITY 4: MAIL MERGE

Project 1

Using the current date, key in the following in block letter style. This document will be the main document for the mail merge. Save the letter as MAIN1.

(inside address)

Dear (person's name):

Thank you for responding promptly to our request for information on the types of business courses offered at your school. We would like to introduce ourselves to some of the young men and women who indicate an interest in our firm.

Since you have so generously responded to our first request, may we ask that you permit us the opportunity to survey the students so we have an idea of how many people we should expect for our annual tour for students? We generally expect about 500 students from all around the state to participate in this tour. We are always looking for students who show an honest interest in our company. We know that these students will be the future of our business.

If this plan is agreeable and you would be interested in letting the students participate, please write and let me know by (date) when it would be convenient to begin.

Sincerely yours,

Mrs. Mary Worth
Personnel Director

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Project 2

Key in the following addresses. This file will be your data file for mail merge. Save the data as DATA1.

Mr. Brice Matthews
Business & Management Center
2214 Bryan Street
Dallas, TX 75201
April 15

Ms. Beverly Lewis
Multiple Careers Center
4528 Rusk Street
Dallas, TX 75204
May 1

Ms. Karen Herrera
Valley View Learning Center
2580 Valley View Lane
Farmers Branch, TX 75234
April 15

Raenell Stevens
Trimble Technical High School
1003 W. Cannon
Fort Worth, TX 76104
April 15

Juan Garza
Harlandale Alternative Center
1115 West Huff
San Antonio, TX 78214
May 1

Russell Franklin
Ennis Area Vocational School
800 West Denton
Ennis, TX 75119
May 1

Elaine Ramirez
El Paso Technical Center
2231 Arizona Ave.
El Paso, TX 79930
May 1

James Wong
Spring Branch Career Center
10660 Hammerly
Houston, TX 77043
April 15

Project 3

Perform a mail merge with the MAIN1 document file and the DATA1 file according to your software instructions.

SECTION **3**

Business Communications

Essential Elements 75.87 (c)(1)

(1) Concepts and skills related to effective communication and production of business documents. The student shall be provided opportunities to:

- A. demonstrate proficiency in business English, spelling, and proofreading;
- B. identify and apply correct format for business correspondence, documents and mail merge;
- C. apply word processing procedures to steps in document production;
- D. demonstrate proficiency in transcription; and
- E. use proper techniques in business telephone usage.

Writing Techniques 3-1

Lesson Plan

Essential Elements: 75.87 (c)(1)(A)(B)
Allocated Time: 10 Hours

Unit Objective: Students will identify business English terminology and demonstrate proper English rules to construct well-written business documents.

Student Competencies: After completing this unit, the student will be able to:

1. Identify and use business English terminology.
2. Demonstrate correct usage of the parts of speech, subject-verb agreement, expression of numbers and abbreviations, and sentence construction.
3. Apply correct punctuation, capitalization, and spelling rules.
4. Compose well-written business letters and documents.

Focus: Communication can take place through speech or a written document. Properly using business English allows you to present your information or ideas clearly and concisely. Correctly presenting information is vital to all employees within an organization.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or affective domains and are coded on the activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

3-1 Writing Techniques

Content Outline

Business English

Parts of speech
Subject and verb agreement
Sentence construction

Expression of numbers and abbreviations

Numbers
Abbreviations

Punctuation

Commas
Semicolons
Underlines
Quotation marks
Apostrophes
Colons
Hyphens
Dash
Parentheses

Capitalization

Proper nouns
Names of the months
Trade names
Names of historic events, holidays, and eras
Titles of high government officials
Titles preceding a person's name
Academic degrees

Spelling

Noun plurals
Noun possessives
Suffixes
"ie" and "ei" combinations
Spelling hints

Types of letters

Letters of goodwill
Letters of request
Letters of positive response
Letters of negative response

Types of reports

Informal reports
Formal reports

Techniques for writing reports

Preparing to write
Outlining facts and ideas
Writing a report
Proofreading and editing

Teacher Activities

Teacher Preparation

- ☐ Preview the unit.
- ☐ Review unit objectives.
- ☐ Make instructional analysis.
- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or affective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Suggestions

☐ Secure various reference and style manuals for the students to use.

☐ The word processing section should be taught before this unit so that the students can use the computer to perform the activities and the competency test.

☐ Reproduce the handouts for the students.

☐ Most of the activities require the students to key in the information; however, if time will not permit this, key in the information on a disk and prepare copies for the students to correct the errors.

☐ The activities can be done on computer or handwritten. Most of the instructions provided are for the computer; however, you may want to adapt the instructions to accommodate written exercises.

☐ Remind the students that they will be using proofreading marks and they should use the handout from the word processing unit that covers them.

☐ The simulation *Carol's Cosmetic Cottage* can be used with this unit and with the word processing unit. You may wish to cover both the word processing section and this unit before assigning this simulation. You can also use it as a culmination activity or save it for the course closure. The simulation stresses word processing and written communications. Refer to the special products pages located at the front of this book for additional simulations that can be used if this course is the only office education course taught at your school. If the course *Office Administrative Systems* is not being taught at your school, the *Office Administrative Systems Simulations* contain a simulation that would work well with this unit.

☐ Remember to use the *Test Builder Program* and the related test bank.

Activity 4

Project 8 Provide the students with the information you want included in their reports on writing business letters. You may want the students to report on all the types of letters they wrote in this unit or you may want them to choose two or three types.

Competency Test

You may want the students to use their handout on letter types. This will help them with the contents of each letter.

Project 5 Provide the student with instructions for the report. The report should be in memo format. The students should be creative and make-up special features of the trip. Have them make the trip sound "hard to resist."

Business Letters, Memos and Reports

■ Letter of Goodwill

Purposes:

☐ Thank someone for favorable action or good service.

☐ Congratulate someone on a promotion of good fortune.

☐ Promote a favorable impression of your company.

Content:

☐ The introductory paragraph is used to tell why the letter is being written.

☐ The next paragraph is used to expand on the information given in the first paragraph.

☐ The last paragraph is used to draw the entire message to a logical conclusion and to leave the reader with a positive feeling (repeating the thanks or congratulations stated at the beginning of the letter).

■ Letter of Request

Purposes:

☐ Ask someone to act in a specific way.

☐ Ask someone to provide a particular service or specific information.

☐ Ask someone to make a contribution in support of a stated cause.

Content:

☐ The introductory paragraph is used to state the request.

☐ The second paragraph is used to explain why you want the information, product, or service requested.

☐ The third paragraph is used to motivate the reader to grant your request.

☐ The last paragraph is used to close the letter in a courteous, positive tone; it may also include information that will help the reader contact you if any problems or questions arise. Paragraphs three and four may be combined in a short letter.

Letter of Positive Response

Purposes:

☐ Fulfill both business and social obligations.

☐ Grant a request by another person.

☐ Build goodwill for the company.

Content:

☐ The introductory paragraph is used to restate the request and to indicate that the request will be granted.

☐ The second paragraph is used to support the first paragraph and to give additional, relevant information.

☐ The last paragraph is used to draw the entire message to a logical conclusion in a courteous, positive tone.

Letter of Negative Response

Purposes:

☐ Deny a request by another person.

☐ Maintain goodwill.

Content:

☐ The introductory paragraph is used to establish goodwill. (Begin by thanking the reader for the request.)

☐ The second paragraph is used to state and explain the refusal in a polite, positive manner.

☐ The third paragraph is used to offer an alternative and clarify that alternative by providing specific information.

☐ The last paragraph is used to close the letter in a positive tone by making the reader feel that you are willing to help in any possible way. Paragraphs three and four may be combined in a short letter.

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■ Interoffice Memorandums

Parts of a Memo:

TO:

FROM:

DATE:

SUBJECT:

Body of memo:

- ☐ A short report to all employees within an organization which presents an idea and the details.

■ Business Reports

Parts of a Business Report:

- ☐ The title page contains the title of the report, the name of the person who prepared the report, name(s) of person(s) to whom the report is to be distributed and the date of distribution.
- ☐ Table of contents—an outline of the contents of the report.
- ☐ Body—includes facts and information; discusses the objective or problem.
- ☐ References—provides a listing of the materials used in preparing the report.

Commonly Misspelled Words

absence
accidentally
accommodate
accompanying
achievement
acquaintance
across
aggressive
aging
aisle
alignment
all right
already
analysis
analyze
answer
apparently
approximate
architect
argument
assistance
attorney
autumn
bachelor
bankruptcy
basically
beginning
believe
benefited
boundary
breakfast
brochure
buses
business
calendar
calorie
campaign
canceled
catalog
category
cemetery
census
changeable
column
committee
comparison
conscience
consistent
continuous
controversy
convenience
criticism
debt
defense
definite
dependent
describe
development
dilemma
disappoint
dissatisfied
double
eighth
either
eligible
eliminate
embarrass
emphasize
empty
environment
exaggerate
exceed
excellent
exercise
existence
experience
extension
extraordinary
eyeing
familiar
fantasy
fascinating
February
foreign
forfeit
forty
fourteen
fourth
fulfill
glamour
government
grammar
grateful
guarantee
guardian
harass
height
hygiene
incidentally
jeopardy
judgment
laboratory
ledger
leisure
liable
library
license
lien
lightning
likable
lose
maintenance
marriage
mileage
millionaire
miscellaneous
mischievous
misspell
mortgage
motor
movable
necessary
negotiate
neither
ninety
ninth
noticeable
nuclear
occasionally
occurrence
offense
offered
oneself
opinion
pamphlet
parallel
partially
patience
permissible
persistent
persuade
physician
possessions
practically
practice
privilege
procedure
proceed
psychological
quantity
receipt
receive
recommend
reference
reinforce
relevant
restaurant
resume
retroactive
rhythm
schedule
scissors
seize
separate
siege
similar
sincerely
skillful
souvenir
sponsor
summary
surgeon
surprise
technique
temperature
their
theory
thoroughly
through
totaled
tragedy
traveler
unforgettable
unique
usage
vegetable
victim
volume
Wednesday
weird
whether
yield

ACTIVITY MATRIX

Activities		Domains			Basic Skills		
		Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1		X				X	
2	Project 1	X	X			X	
	Project 2	X			X		
	Project 3	X			X		
	Project 4	X	X		X	X	
	Project 5	X			X		
	Project 6	X	X		X	X	
3	Project 1	X			X		
	Project 2	X			X		
	Project 3	X			X		
	Project 4	X			X		
	Project 5	X			X		
	Project 6	X			X		
	Project 7	X			X		
	Project 8	X			X		
	Project 9	X			X		
	Project 10	X				X	
	Project 11	X				X	
	Project 12	X			X		
4	Project 1	X	X		X	X	

ACTIVITY MATRIX (Continued)

Activities	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
Project 2	X	X		X	X	
Project 3	X	X		X	X	
Project 4	X	X		X	X	
Project 5	X	X		X	X	
Project 6	X	X		X	X	
Project 7	X	X		X	X	
Project 8	X	X		X	X	

COMPETENCY TEST MATRIX

Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
Project 1	X	X		X	X	
Project 2	X	X	X	X	X	
Project 3	X	X		X	X	
Project 4	X	X		X	X	
Project 5	X	X	X	X	X	

Writing Techniques 3-1

Competency Test

Project 1

Use the following information to compose a letter of request. Key in the letter using any acceptable format. Proofread and correct your work to produce a mailable document.

You are the secretary of your school photography club at Bismark High School. Your club is planning a spring-break trip to Aspen, Colorado, to ski and take pictures. Address the letter to Snowtop Lodge, 9999 Frosty Way, Aspen, CO 53662, and request the cost and availability of six double rooms for five days during your spring break. Find out if a deposit is required, the amount, and the date it is due. You also would like any information the hotel might have on the local skiing facilities and recreation activities.

Project 2

Use the following information to compose a letter of positive response. Key in the letter using any acceptable format. Proofread and correct your work to produce a mailable document.

As Sally Ramirez, Reservation Agent, you reply to the letter from Bismark High School. Tell the writer that you will be happy to make the reservations for March 3 through March 7. The cost of six double rooms for five days will be $80 per room plus tax, per day; however, a 10% discount will be extended if half the cost for the five days is remitted within 10 days of the reservations. Tell the writer that a brochure has been included that gives details about the ski facilities that are near the hotel, the discounts provided by the ski facilities when purchased with the hotel reservations, and a tentative schedule of events for that week.

Project 3

Use the following information to compose a letter of negative response. Key in the letter using any acceptable format. Proofread and correct your work to produce a mailable document.

As Sally Ramirez, Reservation Agent, you are unable to provide the accommodations requested by the writer at Bismark High School. Tell him/her that during the week of March 3 through March 7 all rooms are full. Tell the student that a sister hotel, Rockytop Lodge, can accommodate his/her request. The cost of six double rooms for five days will be $90 per room plus tax, per day; a 5% discount will be extended if half the cost for the five days is remitted within 15 days of the reservations. Tell the writer that the letter has been forwarded to the Rockytop Lodge and he/she should hear from them soon regarding the skiing facilities and a tenative activity schedule for that week.

Project 4

Use the following information to compose a letter of goodwill. Key in the letter using any acceptable format. Proofread and correct your work to produce a mailable document.

As the secretary of the school photography club at Bismark High School, write a letter to the Snowtop Lodge thanking Sally Ramirez, the reservation agent, for forwarding their letter to the Rockytop Lodge. Tell Sally that next year they will plan earlier so they can stay at the Snowtop Lodge.

Project 5

Using the instructions provided by your instructor, prepare a one-page report to the members of the photography club giving them information about the trip. Be sure to proofread the document.

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Activity Answers

Activity 1 Evaluated to the satisfaction of the instructor.

Activity 2

Project 1 Evaluated to the satisfaction of the instructor.

Project 2

1. You should always keep your reader in mind when you write a letter.
2. The author of a letter should choose clear, concise words.

Project 3

1. was
2. is
3. is
4. was
5. was
6. was
7. is
8. has
9. is
10. has

Project 4

1. A
2. A
3. Ann Garza wrote the report.
4. Mark completed an article...
5. Al Lewis informed the staff members...

Project 5

1. C
2. C
3. businessmen's
4. C
5. C
6. families
7. C
8. C
9. C
10. Sam's

Project 6

1. C
2. The president of the firm is Howard P. Jacobson, Jr
3. Mr. Robert T. Simpson will be our guest speaker.
4. Thirty-four...eight-page...
5. C
6. C
7. On September 7,...
8. Please print 200
9. C
10. C

Activity 3

Project 1

1. Ronald Williams Sr., my supervisor, told me that I would get a raise.
2. The report listed the large, outstanding debts of the firm.
3. The tall, thin, spindly trees waved in the strong wind.
4. The receptionist, Andy Youngblood, does a good job of meeting the public.
5. Maureen, will you get this letter in the mail this morning?
6. The reports were completed today, and they will be mailed tomorrow.
7. In all there were 14, 11 of which were faulty.
8. The box contained paper clips, rubber bands, pins, staples, etc.
9. Yes, I said that I would take responsibility for the failure.
10. When the training program is completed, we will receive certificates.

Project 2

1. The financial statement was completed; the report to the stockholders was prepared.
2. We will prepare the stencils; they will duplicate the report.
3. The job must be finished this week; consequently, we will work overtime.
4. She did the best job she could; nevertheless, it was not good enough.
5. Ms. Jones interviewed all the candidates; thus, she was able to select the best qualified candidate.
6. William typed the reports, letters, and memos; and he was always busy.
7. Mr. Doud reported an upswing in business; but he reminded us of the inefficiency waste, and disorganization that still existed.

8. She received the following: three invoices, each marked paid; five statements, one containing an error; and three letters, each with her name misspelled.
9. Hula hoops and bongo boards were once immensely popular; today they are forgotten objects.
10. He knew that tickets for the concert would be scarce; therefore, he arrived at the box office hours before it opened.

Project 3

1. The title of the book was *Some Went to War.*
2. "We will arrive at noon," Betty said.
3. She subscribed to *Time*, a weekly news magazine.
4. He felt the word "nuclear" was hard to pronounce.
5. Lennie Martin delivers the *Daily Globe* to our house.
6. Mary's speech, "You Begin at the Bottom," was well received.
7. Of Hitchcock's movies, *Psycho* is the scariest.
8. That abbreviation means "in the same place."
9. The author's stories have appeared in *Redbook*, *Vogue*, and *Ms.*, among other magazines.
10. "When," Bob asked, "do you plan to leave?"

Project 4

1. The office manager's office is near the elevator.
2. James's training lasted for six months.
3. The managers' conference was very successful.
4. The instructor asked, "have you read the article 'Offices of the Future' as you were assigned?"
5. We inserted the's, and's, and that's in the letter.
6. Paul and Maria received their M.B.A.'s from Harvard.
7. I couldn't and wouldn't dampen the class enthusiasm.
8. It was Winston and Cartwright's first novel together.
9. Children's clothes are sold only on the first floor of the store.
10. My father's birthday was yesterday.

Project 5

1. Mix the ingredients as follows: sift the flour and salt together, add the milk, and slowly beat in the egg yolk.
2. The Pilgrims had one major reason for coming to the New World: they sought religious freedom.
3. The vote carried by a two-thirds margin.

4. My great-grandfather is still driving a car.
5. He concluded with an ultimatum: "Either improve the mass transit system or anticipate further decay in your downtown area."
6. The conference was a first-class operation.
7. The competition will be held July 15-21.
8. The supervisor quoted first-, second-, and third-class rates.
9. Two chief elements make work interesting: first, the exercise of skill, and second, construction.
10. The meeting will be held in the boardroom at 10:30 tomorrow morning.

Project 6

1. The FTC (Federal Trade Commission) ruled that the advertising was misleading.
2. The Civil War period (1861-1865) was a difficult time for the country.
3. It was just yesterday—or was it Friday—that she called.
4. The party of the first part agrees to pay Five Hundred Dollars ($500).
5. Miss Johnson—an outstanding teacher—recommended further training.
6. The masterpiece—a Rembrandt—was displayed in a prominent location.
7. To be promoted you must have: (1) a college degree, (2) three years of experience, and (3) good ratings from your supervisor.
8. A penny saved is a penny earned.—Franklin
9. Some exotic pets (monkeys and fragile breeds of dogs) require too much care to be enjoyable.
10. The two brothers—one tall and thin, the other short and stout—look nothing alike.

Project 7

1. One horizontal inch equals 12 elite spaces; one horizontal inch also equals 10 pica spaces.
2. Claudia has lived in Dallas, Texas; New Orleans, Louisiana; and Tulsa, Oklahoma.
3. The steps for typing all capital letters are as follows: depress the shift lock, type the words, release the lock by touching the right shift key.
4. Although some paragraphs are single-spaced, other paragraphs may be double-spaced.
5. Our up to date textbook is easy to understand.
6. The rough-draft copy of the book *Writing Business Letters* is almost complete.
7. The height of Ellen's chair needs adjusting.
8. The company's mailroom is on the third floor, and the president's office is on the fifth floor.
9. Alex agreed to proofread the following two chapters: "Interoffice Memorandums" and "Two-Page Reports."
10. A full sheet of 8½ by 11" paper has 66 lines; a half sheet has 33 lines.

Project 8

1. The new state house is very imposing. It is made of reflective glass and steel.
2. My grandmother told me stories about my father and Uncle Bill.
3. Although Rashid is a Moslem, he is very knowledgeable about the Bible, especially the Old Testament.
4. Professor Kellogg recommended that *Sexist and Non-Sexist Language* be a required text for all fall writing courses.
5. The photograph showed Senator Ertel shaking hands with the Rabbi of the largest synagogue in Florida.
6. The Grand Canyon is in Arizona, not too far from Phoenix.
7. Wayne Colson, M. D., knew his medicine, but his manner made his patients nervous.
8. Our scavenger-hunt map directed us two blocks southeast and two blocks northeast to find an old sink on Elm Street.
9. The Suwannee River rises in the Okefenokee Swamp and moves through Georgia and Florida to the Gulf of Mexico.
10. The new Saunders Theater is an acoustical triumph, but, oh, it was expensive to build.

Project 9

1. In the fall I think I will take English, history, and keyboarding.
2. Our marketing director, Robert Thompson, will be a guest speaker at Marshall High School.
3. Before coming to San Antonio, President Reagan stopped in Dallas.
4. President Reagan gave an interesting, lively speech on the Middle East; however, he did seem tired from traveling.
5. Next month Miriam Fitch, president of Fitch Industries, will be coming to Kennedy High School to speak on job opportunities.
6. You will need the following supplies for the next math exam: Pencil, paper, and a calculator.
7. Our new class officers are Mark Morley, president; Karen Wilson, vice president; and Andrew Warner, secretary.
8. Please open the window, Rhonda.
9. On Wednesday, March 12, our Spanish club will take a trip to Mexico City.
10. I can't remember who said, "to be or not to be, that is the question."

Project 10

1. studies
2. mottoes
3. years
4. attorneys
5. gypsies
6. churches
7. halves
8. alumni
9. scissors
10. sheep

Project 11

1. runner
2. wished
3. malicious
4. suspension
5. recurrence
6. likable
7. improvement
8. worried
9. advancement
10. delaying

Project 12

1. Circle
2. Circle
3. Circle
4. Circle
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6. Circle
7. Circle
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57. Circle
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60.

Activity 4

Projects 1-8 Evaluated to the satisfaction of the instructor.

Competency Test Answers

Projects 1-5 Evaluated to the satisfaction of the instructor.

Telephone Techniques 3-2

Lesson Plan

Essential Element: 75.87 (c)(1)(E)
Allocated Time: 10 Hours

Unit Objective: The students will describe and discuss telephone equipment, systems, features, and services using related terminology. Proper pronunciation, articulation, handling of incoming calls, and placing outgoing calls will be demonstrated.

Student Competencies: After completing this unit, the student will be able to:

1. Identify traditional telephone terminology.
2. Describe telephone equipment and systems.
3. Discuss special telephone features and services.
4. Demonstrate characteristics of good listening skills.
5. Apply good telephone pronunciation and articulation techniques.
6. Demonstrate positive techniques of handling incoming and placing outgoing telephone calls.

Focus: The telephone is one of the most vital pieces of equipment in any business. Without telephone service, every business could almost come to a standstill. A good telephone personality allows you to create a favorable image for both the business and yourself.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or affective domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

3-2 Telephone Techniques

Content Outline

Telephone equipment and systems

Key telephone systems
Types of key systems
Telephone networks
Types of special equipment

Special telephone features and services

Special telephone features
Types of telephone services

Listening skills

Hearing and listening
Good listening techniques

Telephone techniques

Projecting a favorable telephone image
Pronunciation and articulation techniques

Incoming and outgoing calls

Handling incoming telephone calls
Placing outgoing telephone calls

Teacher Activities

Teacher Preparation

- ☐ Preview the unit.
- ☐ Review unit objectives.
- ☐ Make instructional analysis.
- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or affective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Suggestions

☐ Prepare bulletin boards with pictures of various types of telephone equipment, a comparison of telephone techniques for incoming and outgoing calls, supplies, etc.

☐ Secure several dictation machines or tape recorders for student use.

☐ Secure videos, slides, or films about telephoning techniques.

☐ Check with your students to see if any parents have cellular phones or paging equipment. Invite parents who have cellular phones/pagers to visit the class to demonstrate and explain the equipment.

☐ Provide the students with current periodicals and/or access to the school library for research.

☐ Have someone from the local telephone company discuss telephone techniques and demonstrate various types of telephone equipment for the class.

☐ Discuss the impact of computers on telephone equipment.

☐ Make copies of the handout on the phonetic alphabetic. Explain that the names are suggestions and other words may be used.

☐ Make copies of the handout on time zones. Help students see how the different time zones affect the way they plan long-distance calls.

☐ A simulation has not been developed specifically for this unit; however, *Office Administrative Systems Simulations* (Car Dial) and *Office Support Systems Simulations* (Smiles, Inc. Modeling Agency) have simulations that could be used for this unit if those courses are not currently being taught at your school. You can use the simulation as a culmination activity or test for the section or for course closure. Refer to the special products pages located at the front of this book for additional simulations that can be used if this course is the only office education course taught at your school.

☐ Remember to use the *Test Builder Program* and the related test bank.

Activities 2-3

Project 1 Secure materials that explain telephone systems, equipment, features, and services. Magazines, periodicals, telephone books, etc. are good resources.

Project 2 Provide the students with magazines, periodicals, telephone books, pictures, etc. that they can use for their posters. Students may bring materials from home.

Activity 4

Read the following story only once and have the students write all the details they can remember.

MONKEY STORY

I want to tell you what happened to me on the last day of my vacation last summer. I was in New York City at a big, exclusive hotel. My room was on the ninth floor. I was all packed, and I called for a bellboy. I waited for thirty minutes, but nobody came to help me with my baggage, so I just gathered up all three bags, my hat box, and my briefcase and headed for the elevator. I waited for what seemed like hours, but the elevator did not come, so I finally trudged down nine flights of stairs with all that luggage.

I finally reached the hotel lobby where I checked out and paid my bill. Then I gathered up all the luggage once more and started for the door. It was one of those revolving doors-you know—and just as I stepped into it, I saw the most amazing sight! Sitting on a sofa in that hotel lobby was a chimpanzee all dressed up in neon-blue hotpants with matching purse and shoes and wearing a blonde wig! I was so astonished that I lost my composure and got caught in that revolving door, scratching the lower left corner of my briefcase, which was a gift from my mother-in-law. Well, when I finally got untangled, I went outside and started to get into a taxi. But just as I reached for the door handle, that dumb taxi driver pulled away, causing me to fall off the curb and get a huge run in my brand new nude-color stockings. Was I mad! However, I finally did get a cab, and we rushed for the airport. I got there just in time to see my flight pull away from the terminal!! What a way to end a vacation!!

Activity 5

Provide dictation equipment for your students to practice their pronunciation and articulation techniques. Have them use the handout on the phonetic alphabet to make problem words and letters more clear.

Activity 6

Project 1 Make copies of the message forms and long-distance phone log.

Competency Test

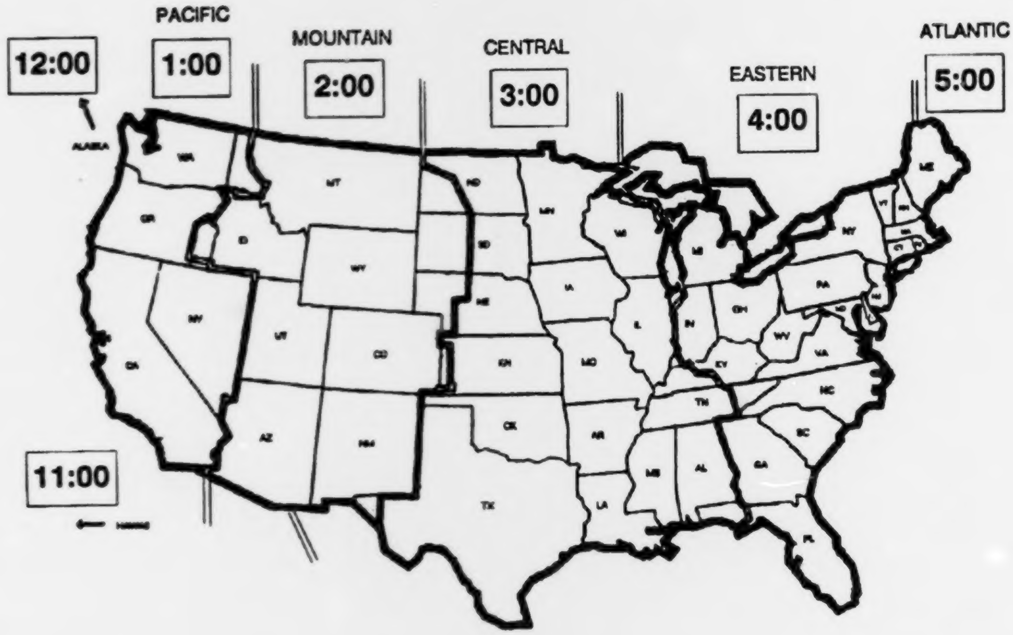
Project 1 Make copies of the message forms and long-distance phone log.

Project 2 Have the students prepare both correct and incorrect methods for the selected situation. You may want to videotape the presentations so the students can see how correct and incorrect methods differ. You may want to modify or add situations.

Phonetic Alphabet

A Alice	B Bertha	C Charles
D David	E Edward	F Frank
G George	H Henry	I Ida
J James	K Kate	L Louis
M Mary	N Nellie	O Oliver
P Peter	Q Quaker	R Robert
S Samuel	T Thomas	U Utah
V Victor	W William	X X-ray
Y Young	Z Zebra	

Time Zone Map



Matrices

ACTIVITY MATRIX

Activities	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1	X			X		
2-3 Project 1	X	X		X	X	
Project 2	X	X		X	X	
4	X				X	
5	X		X	X	X	
6 Project 1	X				X	
Project 2	X			X	X	

COMPETENCY TEST MATRIX

Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
Project 1	X			X	X	
Project 2	X	X	X	X	X	X

Competency Test

Project 1

For each of the following situations, prepare message forms or log long-distance calls. Assume you are in San Antonio, Texas.

1. Bill Turner placed a call to Richard Myner in Miami, Florida, at 1:30 p.m. concerning the conference schedule. (305) 579-8365.
2. Richard Myner is returning Bill Turner's call. It is 2:15 p.m. but Mr. Turner is on another line. Mr. Myner says he will send the schedule overnight express mail.
3. Dana Hines called for Sharon Cain at 10:55 a.m. Ms. Hines was unavailable. Ms. Cain has the information requested about the new computer system. She will be available only until 1:30 today. (903) 886-3322.
4. Sharon Cain returned Dana Hines call at 12:45. (903) 886-3322.

Message

For

From

Date Time

Phone No.

Telephoned		Please call	
Called to see you		Will call again	

Message:

Call taken by

Message

For

From

Date Time

Phone No.

Telephoned		Please call	
Called to see you		Will call again	

Message:

Call taken by

Message

For

From

Date Time

Phone No.

Telephoned		Please call	
Called to see you		Will call again	

Message:

Call taken by

Message

For

From

Date Time

Phone No.

Telephoned		Please call	
Called to see you		Will call again	

Message:

Call taken by

Logging Long-Distance Telephone Calls

Date	Time	Caller's Name	Phone # Called	City	ST	Name of Person Contacted	Length of Call	Purpose	Init.

Project 2

Working in groups of four, select one of the following situations. Get approval for your choice from your instructor. Then working in pairs, create a script for the proper way to handle the situation. Assume you are speaking on the telephone. Prepare a script that illustrates the incorrect way to handle the situation. Your instructor will tell you how you will present the scripts to the class.

1. Assume one of you is employed at a local business and the other is a sales representative for the local telephone company. The person from the business wants information about systems, equipment, features, and services. The representative for the telephone company must reply to the questions.

2. Assume one of you is a sales representative employed by *Telemart*, a major telecommunications center. Your company explains systems and equipment for large corporations that service international customers. The other person is a purchasing agent for *Connections International*, which has approximately 300 persons working per shift. Many incoming and outgoing calls are international calls, but the majority of the calls are domestic. CI is looking for the best telecommunications features and services available. *Telemart* was recommended to them as an excellent service organization.

3. Assume one of you is an information processing specialist who performs many duties over the telephone and needs an upgrade of his/her current system and equipment. The other person is a representative of *Sound Systems*, a company that specializes in telephone systems and equipment. The representative should be prepared to answer questions on the upgrades required by the information processing specialist.

4. Assume one of you is employed by the local bank, and your responsibilities include accumulating current information on telephone systems and equipment features and services that would benefit the bank. The other person is a representative of *Contemporary Communications*, a new communications center that has new and unique systems and equipment which can be ordered with special phone features and services.

5. Assume one of you is a representative of *Business Professionals of America*, and you would like a telephone representative to give a presentation about current telephone systems, equipment, features, and services to your organization. The other person will be the representative and will give information concerning the new "hot" business items.

Activity Answers

Activity 1

```
     PERSONTOPERSON
     B           P
     X    KEYSYSTEM
       C         R
      CONFERENCECALL
D      M         T
I      M         O
R CALLFORWARDING R
E A    N        WATS
COLLECTCALL  T   S P
T L    A     I   S E
D W  C REGISTER  I A
I A  H R     L T S K
A I PAGINGDEVICE T E
L T  N E     N L E R
  I  N R     E E D P
CENTREX      S X   H
  G  L             O
                   N
      TELECONFERENCE
```

Activities 2-3

Project 1 Evaluated to the satisfaction of the instructor.

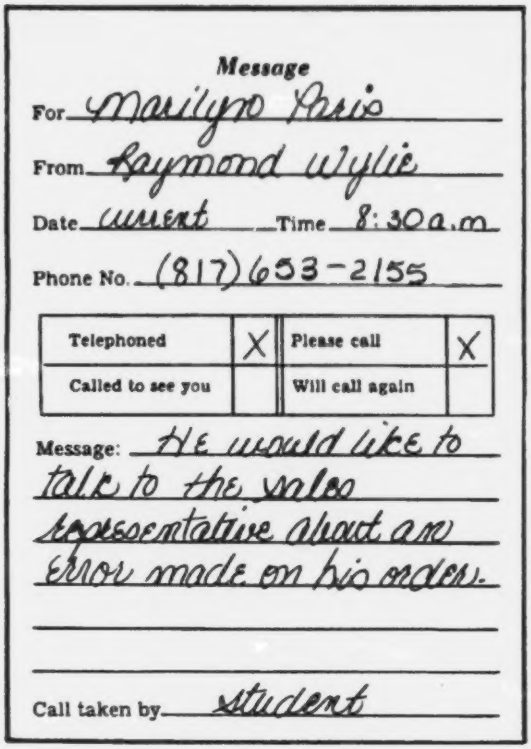
Project 2 Evaluated to the satisfaction of the instructor.

Activity 4 Evaluated to the satisfaction of the instructor.

Activity 5 Evaluated to the satisfaction of the instructor.

Activity 6

Project 1



Message

For Marilyn Paris

From Raymond Wylie

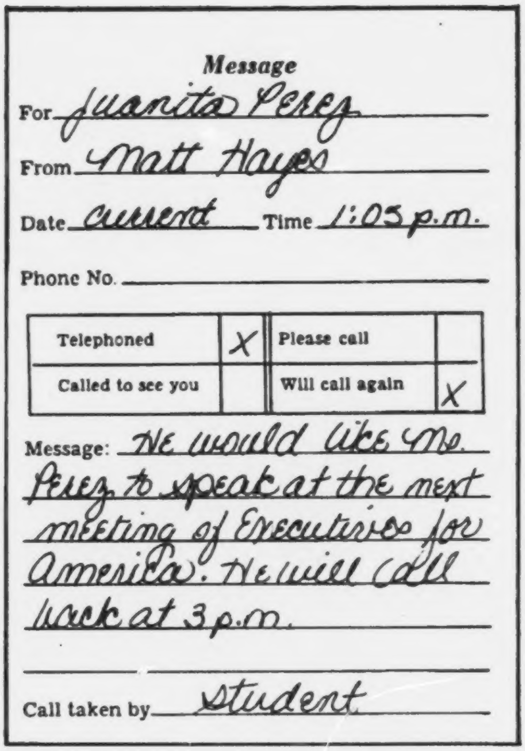
Date current Time 8:30 a.m

Phone No. (817) 653-2155

Telephoned	X	Please call	X
Called to see you		Will call again	

Message: He would like to talk to the sales representative about an error made on his order.

Call taken by student



Message

For Juanita Perez

From Matt Hayes

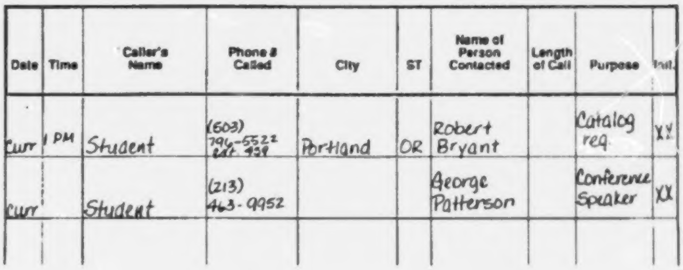
Date current Time 1:05 p.m.

Phone No.

Telephoned	X	Please call	
Called to see you		Will call again	X

Message: He would like Ms. Perez to speak at the next meeting of Executives for America. He will call back at 3 p.m.

Call taken by Student



Date	Time	Caller's Name	Phone # Called	City	ST	Name of Person Contacted	Length of Call	Purpose	Init.
curr	1 PM	Student	(503) 796-5522 ext. 939	Portland	OR	Robert Bryant		Catalog req.	XX
curr		Student	(213) 463-9952			George Patterson		Conference Speaker	XX

Project 2 Evaluated to the satisfaction of the instructor.

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Competency Test Answers

Project 1

Message

For Bill Turner

From Richard Myner

Date Current Time 2:15 p.m.

Phone No.

Telephoned	X	Please call	
Called to see you		Will call again	

Message: He will send the schedule overnight express mail.

Call taken by Student

Message

For Sharon Cain

From Dana Hines

Date current Time 10:55 a.m.

Phone No. (903) 886-3322

Telephoned	X	Please call	X
Called to see you		Will call again	

Message: She has the information requested about the new computer system. She will be available only until 1:30 p.m. today.

Call taken by Student

Date	Time	Caller's Name	Phone # Called	City	ST	Name of Person Contacted	Length of Call	Purpose	Init.
Curr	1:30 PM	Bill Turner	(305) 579-8365	Miami	FL	Richard Myner		Conference Schedule	xx
Curr	12:45 PM	Sharon Cain	(903) 886-3322			Dana Hines		Computer System	XX

Project 2 Evaluated to the satisfaction of the instructor.

Transcription Techniques 3-3

Lesson Plan

Essential Element: 75.87 (c)(1)(D)
Allocated Time: 10 Hours

Unit Objective: The students will discuss transcription media and equipment features and demonstrate efficient transcription techniques to transcribe mailable business documents from dictated tapes.

Student Competencies: After completing this unit, the student will be able to:

1. Identify and discuss transcription media and equipment features.
2. Demonstrate efficient transcription techniques.
3. Demonstrate the ability to transcribe mailable business documents from dictated tapes.

Focus: Transcription still plays a part in most offices. Not everyone has the ability nor the time to sit at a keyboard to compose and key in a document. People are still hired to enter documents from rough drafts and tape. Learning this skill can help you when applying for entry-level positions in business.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or affective domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

3-3 Transcription Techniques

Content Outline

Transcription equipment and features

Discrete media equipment
Features of equipment

Efficient transcription techniques and procedures

Transcription skills
Transcription procedures

Teacher Activities

Teacher Preparation

☐ Preview the unit.

☐ Review unit objectives.

☐ Make instructional analysis.

☐ Assess student learning needs.

☐ Decide on lesson domain: cognitive, psychomotor, or affective.

☐ Select instructional materials based on instructional analysis and student learning needs.

☐ Select instructional strategies based on lesson content and student learning needs.

☐ Prepare lesson plans from the unit lesson.

☐ Prepare additional instructional material.

☐ Reserve necessary media and equipment.

Teacher Presentation

☐ Present student objectives.

☐ Establish rapport with students.

☐ Review lesson objectives with students.

☐ Relate lesson to prior or future learning.

☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.

☐ Emphasize the value/importance of the unit or activity.

☐ Allow time for closure of a lesson.

Reteach Activities

☐ Identify area(s) of weakness from results of evaluation.

☐ Select unit activities not previously used.

☐ Use additional resources and/or create materials based on student learning needs.

☐ Use a different teaching strategy in reteaching.

☐ Retest.

Specific Teaching Suggestions

☐ Demonstrate the correct procedures for:

▲ Using a dictation unit

▲ Dictating material

▲ Using a transcription unit

▲ Transcribing media

☐ Require that all students clean the ear sponges of the headsets with alcohol before and after using the sets to prevent the spread of ear infections.

☐ Instruct students on the proper way to handle media.

☐ Make sure the students who are transcribing tapes are not playing cassette tapes of their own when they are supposed to be working on the prerecorded material provided.

☐ Instruct students on the proper way to wear the headset.

☐ Remind the students that they do not have to keep up with the speaker on tape. Provide them practice in listening, keying, rewinding, and relistening techniques.

☐ Explain the queing procedures that are specific for your equipment.

☐ Stress to students the importance of using reference materials. Require that students look up words in the dictionary—do not spell the words for them.

☐ Provide students with a diagram of the transcription equipment used in your class-room. This diagram may be found in the users manual for your equipment. Duplicate this illustration, or make a transparency of it so that students will have it for reference when adjustments of the equipment need to be made.

☐ Provide students with prepared media for transcription. Select a transcription simulation that challenges the students, but is not too lengthy—modify its length to fit the number of hours you have designated for this unit. Remember, students' adeptness in transcription will rely heavily on their keyboarding and English backgrounds. Emphasize that students **MUST** proofread their documents.

- ☐ Ideally, transcription should be performed using a computer and word processing program. It is essential that students have at least a basic proficiency in operating the chosen word processing program. Otherwise, students may spend their time learning to use the software rather than learning transcription techniques.

Activity 2 Provide the students with dictation/transcription equipment. Copy the script on the following page for each student, but collect the scripts prior to the students' transcribing so they will not copy the information from the script. You may want to modify the script if necessary to fit the needs of the students.

Activity 3 Provide the students with practice dictation material that you have taped or from a simulation. Perhaps some letters from an old shorthand book would be appropriate. You may also wish to use letters that were prepared for the word processing section or for the writing techniques unit. Advise the students to be critical of the dictation quality on their tape, and to correct or redictate as necessary to make quality recordings.

Competency Test

Several sets of dictation tapes are available for use. Select appropriate letters and other documents for the students to transcribe.

"Operator, this is (your name), President, Career Consultants, Inc. Please type the following letter on my letterhead, make one file copy, and address an envelope. Address the letter to Mrs. Juanette, J-U-A-N-E-T-T-E, Klein (with a K), Sales Director, Technico, Inc.,(T-E-C-H-N-I-C-O), five zero two eight Manor-(M-A-N-O-R) Road, Austin comma TX ZIP seven eight seven zero two hyphen four two three five. Dear Mrs. Klein: Subject colon Employees', E-M-P-L-O-Y-E-E-S apostrophe, Pension Plan. Enclosed are the newly released regulations for the pension plan for our employees. You will notice that all of our employees are now covered in our plan, whether they are full hyphen time or part hyphen time. Paragraph. I hope that this information will be helpful to you in revising the pension plan for your business, correction, company. If I can be of further help, please feel free to call on me. Very truly yours. Operator, please refer to Mrs. Klein's title at the beginning of the letter—that should be Director of Sales."

Ten Commandments for Good Listening

☐ **Stop talking**—you cannot listen if you are talking. Polonius (Hamlet): "Give every man thine ear, but few thy voice."

☐ **Put the talker at ease**—help him/her feel that he/she is free to talk. This is often called a "permissive environment."

☐ **Show them that you want to listen**—look and act interested. Do not read your mail while they talk. Listen to understand rather than to reply.

☐ **Remove distractions**—do not doodle, tap, or shuffle papers. Will it be quieter if you shut the door?

☐ **Empathize with the speaker**—try to put yourself in his/her place so that you can see his/her point of view.

☐ **Be patient**—allow plenty of time. Do not interrupt him/her. Do not start for the door or walk away.

☐ **Hold your temper**—an angry person gets the wrong meaning from words.

☐ **Go easy on argument and criticism**—this puts him/her on the defensive. He/she may "clam up" or get angry. Do not argue. Even if you win, you lose.

☐ **Ask questions**—this encourages him/her, and shows that you are listening. It helps to develop points further.

☐ **Stop talking**—this is the first and last commandment because all other commandments depend on it. You simply cannot do a good job of listening while you are talking.

Nature gave man two ears but only one tongue,
which is a gentle hint that he should listen more than he talks.

* Keith Davis. *Human Relations in Business.* McGraw-Hill Book Company, Inc. 1957, page 241.

ACTIVITY MATRIX

Activities	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1	X				X	
2 Project 1	X	X	X	X	X	X
Project 2	X	X			X	
3	X	X		X	X	X

COMPETENCY TEST MATRIX

Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
	X	X		X	X	X

Competency Test

Using the tapes provided by your instructor, transcribe and produce mailable documents.

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3-3 Transcription Techniques

Answers

Activity Answers

Activities 1-3

Evaluated to the satisfaction of the instructor.

Competency Test Answers

Evaluated to the satisfaction of the instructor.

SECTION 3

Business Communications

Unit 1: Writing Techniques

Unit Objective: Students will identify business English terminology and demonstrate proper English rules to construct well-written business documents.

Student Competencies: After completing this unit, the student will be able to:

1. Identify and use business English terminology.
2. Demonstrate correct usage of the parts of speech, subject-verb agreement, expression of numbers and abbreviations, and sentence construction.
3. Apply correct punctuation, capitalization, and spelling rules.
4. Compose well-written business letters and documents.

Focus: Communication can take place through speech or a written document. Properly using business English allows you to present your information or ideas clearly and concisely. Correctly presenting information is vital to all employees within an organization.

Writing Techniques 3-1

Terminology

Active voice	Action expressed by the verb in the sentence is performed by the subject.
Adjective	Modifies nouns and pronouns.
Adverb	Modifies verbs, adjectives, and other adverbs.
Appendix	Additional, but not vital, information added at the end of a report.
Articulation	Clear, distinct formation of words when speaking.
Bibliography	A complete listing of references or sources used to prepare a report.
Collective noun	A singular noun referring to a group such as "committee" or "choir."
Conjunction	Joins words, phrases, clauses, and sentences.
Direct approach	Inductive approach; writing from specific to general information.
Editing	Analyzing a document for accuracy, coherence, and overall effect; noting any revisions.
Endnote	A reference cited at the end of a report referring to a specific portion of the text. Used in place of a footnote.
Footnote	A reference printed at the bottom of the page referring to a specific portion of the text on the same page.
Hyphen	Used to divide or compound words, word elements or numbers.
Indirect approach	Deductive approach; writing from general to specific information.

Interjection	A word or group of words used to show a sudden burst of emotion; an exclamation.
Letter of authorization	A message which assigns responsibility for writing a report to the author.
Letter Report	A short report written in letter format usually sent outside the company.
Letter of transmittal	A message from the author to the reader.
Limitation	Any aspect restricting what is being included in a report.
Memorandum report	A short report written in memorandum format used mainly within a company.
Noun	Name of person, place, thing, or idea.
Possessive	A word showing ownership, origin, or possession.
Preposition	Shows the relation between its object (noun or pronoun) and another word in the sentence.
Proofreading	Checking the final copy of a document against original material for mechanical errors.
Projection	Speaking loudly enough for audience to hear easily.
Pronoun	Takes the place of a noun.
Scope	In a written report, the breadth or range of the topic.
Suffix	Syllable(s) added to the end of a word to change its meaning (e.g. remark + able = remarkable).
Synopsis	A concise summary of a report.
Title page	Includes author's name, date, title of report, and sometimes identification of the reader.
Tone	Quality or pitch of one's voice.
Verb	Shows action or state of being.

Unit Overview

Business English

☐ Parts of speech

- ▲ **Noun**—the name of a person, place, thing, or idea (e.g. clerk, building, computer, freedom).
- ▲ **Pronoun**—takes the place of a noun (e.g. he, them, it, that).
- ▲ **Verb**—shows action or state of being (e.g. read, understand).
- ▲ **Adjective**—modifies nouns or pronouns. (e.g. the *new* typewriter).
- ▲ **Adverb**—modifies verbs, adjectives, and other adverbs. (e.g. He understood *completely*.)
- ▲ **Conjunction**—joins words, phrases, clauses, or sentences (Anna *and* Sarah studied together.)
- ▲ **Preposition**—shows the relation between its object and another word in the sentence. (e.g. Robert drove *to* the office.)
- ▲ **Interjection**—used to show a sudden burst of emotion; an exclamation. (e.g. *Oh*! Now I understand.)

☐ Subject and verb agreement

- ▲ Singular subject—requires a matching singular verb. (e.g. Carl walks to work.)
- ▲ Compound subject
  - A compound subject joined by "and" requires a plural verb. (e.g. Carl and Jennifer *walk* to work.)
  - A compound subject joined by "or" or "nor" requires a singular verb. (e.g. Either Carl or Jennifer *works* on Fridays.)
- ▲ "Each," "every," and "many a" require singular verbs. (e.g. Each of the workers *takes* a vacation during the summer.)

- ▲ When singular and plural subjects are combined, the verb agrees with the subject closest to the verb. (e.g. The president and three employees *are* going to the conference.)
- ▲ Collective nouns may be singular or plural. A collective noun is a singular noun referring to a group. If the noun is acting as one unit, use a singular verb. If the members of the collective noun are acting separately, use a plural verb. (e.g. The class is on a field trip; but, the faculty are working on their lesson plans.)
- ▲ Plural nouns with singular verbs
  - Plural nouns having singular meaning require singular verbs. (e.g. News travels quickly.)
  - Sums of money, a quantity, or a number agree with a singular verb. (e.g. Fifty pounds is a lot of weight to gain in one year.)

☐ Sentence construction

- ▲ Avoid long, "run-on" sentences.
  - Run on: Sue and Jane went to see a movie last night and they said it was the worst movie they had ever seen.
  - Better: Sue and Jane went to see a movie last night. They said it was the worst movie they had ever seen.
- ▲ Avoid short, "choppy" sentences.
  - Choppy: We completed our work. We went home.
  - Better: When we completed our work, we went home.
- ▲ Be concise; avoid unnecessary words.
  - Wordy: The undoubtedly highest and widest circus tent in the world was erected this bright and beautiful morning in a field which was once a meadow just outside of town.
  - Better: The world's largest circus tent was erected this morning just outside of town.
- ▲ Use active voice rather than passive voice. In active voice, the subject of the sentence is **doing** something.
  - Passive: The bill was paid by me.
  - Active: I paid the bill.
- ▲ Use picture words. Imagery causes the reader to see exactly what the writer intends. Use a variety of words to express an idea.
  - Avoid: The squirrel ran across the lawn and up a tree.

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- Better: The furry gray squirrel raced across the snow covered lawn and up the thick trunk of a leafless tree.

Expression of numbers and abbreviations

- ☐ Numbers may be written in figures or spelled out.
  - ▲ Numbers written as words
    - Beginning of a sentence (e.g. Twenty-five students...)
    - Numbered street names, if they are between one and ten (e.g. Tenth Avenue)
    - The numbers one through ten (e.g. The next five students...)
    - Fractions standing alone (e.g. You should receive one-third of the refund today.)
    - On-the-hour time (e.g. The meeting begins at one o'clock.)
  - ▲ Numbers written as figures:
    - Percentages and discount terms (e.g. a 10 percent discount)
    - Measurements (e.g. a 9-inch envelope)
    - Dollar amounts (e.g. Please send $5.25.)
    - A year (e.g. in 1989...)
    - A day following a month (e.g. We will leave on January 6.)
    - Credit card, telephone, invoice, model, serial, and similar numbers (e.g. The serial number on the computer is A234893.)
    - Series of three or more numbers in a sentence (e.g. There were 20 contestants entered in Shorthand I, 3 entered in Shorthand II, and 10 in Information-Communication I.)
    - Fractions with whole numbers (e.g. The paper measures 8½ inches across.)
    - Time expressed with "a.m." or "p.m." (e.g. We will meet at 10:15 a.m.)
- ☐ Abbreviations should be used to save space in such materials as labels, statistical matter, or footnotes.
  - ▲ Spell out personal names.

- Abbreviate Mister, Doctor, and Mistress in front of a person's name.
- Abbreviate a title used with a first and last name. (e.g. Dr. Arnold Greene, but Doctor Greene)
- Abbreviate seniority titles, academic degrees, and religious designations when following a name. (e.g. Helen Young, Ph.D.)

Punctuation

Punctuation marks clarify meaning and make reading easier by stopping the eye or slowing the thought process. Refer to a reference manual when questioning punctuation.

☐ Commas are used:

- To separate independent clauses joined by a coordination conjunction such as and, but, or, nor. (e.g. We are going home, but Jackie will stay with you.)
- To separate words, phrases, or clauses in a series. (e.g. Tammy, Jim, and Mike will attend the meeting.)
- After introductory words and phrases. (e.g. Before she made the appointment, she checked her calendar.)
- To set off parenthetical expressions in sentences. (e.g. We are, however, unable to meet with you today.)
- To set off an appositive. (e.g. The director, Jean Moore, attended the meeting.)
- Between adjectives. (e.g. She was a very dependable, competent secretary.)
- To set off a direct address. (e.g. Thank you for your order, Mrs. Turner.)
- To show omission of words that are easily understood from the context of the sentence. (e.g. The first order will be shipped on November 13, and the second, on December 1.)
- To set off a direct quotation from the rest of the sentence. (e.g. "The meeting will be held in the conference room," announced the director.)
- To separate words that are repeated for emphasis. (e.g. We are very, very happy about your promotion.)
- To set off titles, degrees, and seniority designations that accompany a person's name. (e.g. Jennifer Schew, M. D., assumes her new position on January 1.)
- To separate the day of the week from the month, and the day of the month from the year. (e.g. Friday, November 13, 1988)

- To separate thousands, hundred thousands, millions, etc., in figures consisting of four or more digits. (e.g. $1,226,000)

☐ Semicolons are used:

- Between clauses in a compound sentence when the clauses are not joined by a conjunction. (e.g. The copier is out of order; the drum has to be replaced.)
- Before a conjunctive adverb (however, therefore, otherwise) when the adverb joins two independent clauses. (e.g. The copier is out of order; otherwise, you could make the copies you need.)
- Between independent clauses joined by a conjunction if either or both of the clauses contain internal commas. (e.g. Bob, Ted, and Alice will attend the conference in Atlanta; and Diane will attend the one in Dallas.)
- Between members of series when one or more of the members contains a comma. (e.g. The new officers are Debbie Thompson, president; Patricia Johnson, vice president; and William Barnes, secretary.)

☐ Underlines are used:

- To emphasize a word. (e.g. You have too many and's in your paragraphs.)
- In material produced by a typewriter to indicate the title of a book, magazine, or newspaper. (e.g. Excepts from Animal Farm, written by George Orwell, appeared in The New York Times and in Newsweek. In computer-generated documents, italics are used in these cases.
- To indicate italics in material to be set in type by a printer. (e.g. Many people misspell receive.)

☐ Quotation marks are used:

- To indicate a direct quotation of someone else's words. (e.g. At the end of the meeting, David said, "Let's meet at this time again next month.")
- To supply special emphasis to words. (e.g. That student has a "can do" attitude.)
- To indicate the title of a portion of a complete publication. (e.g. Please read Chapter 3, "How to Write Business Letters.")

☐ Apostrophes are used:

- To show possession.

- Add an apostrophe and an "s" to singular nouns or plural nouns not ending in s. (e.g. The principal's car is green. The sheep's wool was sheared today.)
- Add an apostrophe and an "s" to a proper name of one syllable that ends in s. (e.g. James's horse can win the race.)
- Add only an apostrophe after plural nouns ending in s and after proper names of more than one syllable that end in s or z. (e.g. The students' papers were due yesterday.)
- Add an apostrophe and an "s" to the final noun only to show joint possession. (e.g. It was Sam and Betty's first home.)

▲ To indicate the omission of letters in contractions or figures. (e.g. Don't forget the tenth reunion of the class of '82 next week.)

▲ To form the plural of words used as words, figures, letters, and abbreviations with periods. (e.g. Her name is spelled with two t's.)

▲ To indicate feet or minutes. (e.g. The office measured 48′ by 72′.)

▲ As single quotation marks for a quotation within a quotation. (e.g. The guest speaker asked, "Have you read the article 'Telecommunications: The Wave of the Future' because many new ideas are introduced.")

☐ Colons are used:

▲ After an expression such as "these" or "the following" when that expression is used to introduce a series of items. (e.g. You will need the following items when you take the test: a reference manual, pencil, and paper.)

▲ To separate an introduction from a long quotation. (e.g. President Kennedy used this quotation in his inaugural address: "Ask not what your country can do for you; ask what you can do for your country.")

▲ To introduce lists, tabulations, enumerations, words, or phrases. (e.g. Do these things before you leave the office: clean up the coffee room, lock the file cabinets, turn off the lights, and lock the door.)

▲ Used in place of the words "that is" or "for example" after a statement that introduces an example or an explanation. (e.g. We have to make a decision: to leave this work unfinished, or to stay late at the office.)

▲ After the salutation of a business letter if a comma is used after the complimentary close. (e.g. Dear Ms. Glasco:)

▲ Between the hours and minutes in clock times that are expressed in figures. (e.g. 10:45 a.m.)

☐ Hyphens are used:

  - In compound numbers from twenty-one to ninety-nine.
  - With the prefixes self-, ex-, and great-. (e.g. This is a self-contained unit.)
  - With a combination prefix and root word that begins with a capital letter. (e.g. The countries formed a pro-American alliance.)
  - When compound adjectives come before a noun. (e.g. Send me the up-to-date file.)

☐ The dash is used:

  - To emphasize a word or group of words. (e.g. The car was flashy, sleek, powerful—and expensive.)
  - To indicate a break or shift in thought. (e.g. That car—the one with the personalized license plate—belongs to the president of Canton College.)
  - To indicate an omission of letters and words.
  - To connect combinations of letters and figures.

☐ Parentheses are used:

  - To enclose material that is supplementary. [e.g. In the following sentences, circle the correct pronoun (refer to chart 1 on page 55).]
  - To enclose figures. [e.g. (10,000 U.S. dollars)]
  - To indicate an enumeration. [e.g. You will need the following items: (1) a reference manual, (2) a pad, and (3) a pencil.]
  - To enclose numbers that follow the written number to ensure accuracy. [e.g. Thirty-four (34) students will go tomorrow.]

Capitalization

☐ Proper nouns (names of specific people, places, etc.) (e.g. President Bush, San Antonio, the East)

☐ Names of the months and days of the week, but never seasons. (e.g. April, Wednesday, fall, spring)

☐ Trade names, but not generic names. (e.g. Xerox, Frigidaire, copier, refrigerator)

☐ Names of historic events, holidays, and eras. (e.g. World War II, Easter, the Renaissance)

☐ Titles of high government officials. (e.g. Senator John Bradley)

☐ Titles preceding a person's name, but not titles that follow a name. (e.g. President William Brierley; William Brierley, president of Canton College)

☐ Academic degrees following a person's name. (e.g. Mildred Starling, M. D.)

Spelling

☐ Noun plurals are formed:

- ▲ By adding "s" to a singular noun. (e.g. committee + **s** = committees)
- ▲ By adding "es" to nouns ending in s, z, ch, sh, or x. (e.g. business + **es** = businesses; tax + **es** = taxes)
- ▲ When a noun ends in "y" with a consonant before the y, change y to i and add es. (e.g. hobby + **es** = hobbies)
- ▲ When a noun ends in "y" with a vowel before the y, just add s. (e.g. attorney + **s** = attorneys)
- ▲ When a noun ends in "o" with a consonant before the o, add es. (e.g. hero + **es** = heroes)
- ▲ When a noun ends in "o" with a vowel before the o, add s. (e.g. duo + **s** = duos)

☐ Noun possessives are used to show ownership, possession, or relationship:

- ▲ By adding an apostrophe and s ('s) to a singular noun. (e.g. Karen's book, a day's drive)
- ▲ If a singular, one-syllable noun ends in an "s" or a "z" sound, add an apostrophe and s. (e.g. boss + **'s** = the boss's report)
- ▲ If a singular noun made up of two or more syllables ends in an "s" or a "z" sound, add only the apostrophe. (e.g. Mr. Connors + **'** = Mr. Connors' vacation)

- ▲ When forming the plural possessive of a noun, use two steps: (1) make the noun plural, and (2) make the noun possessive.
  - If a plural noun ends in s, add an apostrophe. (e.g. churches + ' = the churches' property)
  - If a plural noun does not end in s, add an apostrophe and an s. (e.g. women + **'s** = the women's forum)

☐ Suffixes are added:

- ▲ By doubling the final consonant:
  - When a one-syllable word ends with a "consonant, vowel, consonant", double the final consonant before adding the suffix. (e.g. swim + **er** = swimmer) Exceptions: do not double the final consonant if the word ends in "w", "x", or "y". (e.g. fix + **ed** = fixed)
  - When a word with two or more syllables ends with a "consonant", double the final consonant if the accent falls on the last syllable. (e.g. occur + **ed** = occurred; refer + **ed** = referred.) (But: refer + **ence** = reference.)
- ▲ If a word ends in "e" preceded by a consonant, drop the "e" before adding a suffix beginning with a vowel. (e.g. hope + **ing** = hoping) (e.g. But: Move + **ment** = movement)

☐ "ie" and "ei" combinations:

- ▲ Remember this verse: "i" before "e" except after "c" or when sounded like "a" as in neighbor or weigh.
- ▲ e.g. "i" before "e": yield, view—except after "c": receive, ceiling—or when sounded like "a"; eight, neighbor. (Remember there are exceptions to every rule.)

☐ Spelling Hints

- ▲ When in doubt about the correct spelling of a word, use a dictionary.
- ▲ Read the guide to the use of your dictionary to determine the preferred spelling of a word.
- ▲ Build a "memory help" to remember spellings. (e.g. There is "a rat" in separate; "All" lines are parallel.)
- ▲ Recognize the prefix and the root of a word. (e.g. mis + spell = misspell)

Types of letters

- ☐ Letters of goodwill
  - ▲ Used to thank someone for favorable action, to congratulate someone on a promotion or good fortune, or to promote a favorable impression about your company.
  - ▲ A common format is:
    - In the introductory paragraph, tell why the letter is being written.
    - Expand on the information given in the first paragraph.
    - Draw the entire message to a logical conclusion, leaving the reader with a positive feeling.
- ☐ Letters of request
  - ▲ Used to ask a person to act in a specific way, to request a particular service or specific information, or to solicit a contribution supporting a stated cause.
  - ▲ A common format is:
    - State the request in the first paragraph.
    - Explain why the information or service is wanted.
    - Motivate the reader to grant the request.
    - Use a courteous and positive tone to close the letter.
- ☐ Letters of positive response
  - ▲ Written to fulfill both business and social obligations, to grant a request by another person, and to build goodwill for the company.
  - ▲ A common format is:
    - Restate and grant the request.
    - Give additional relevant information.
    - Draw the message to a logical conclusion using a courteous, positive tone.
- ☐ Letters of negative response
  - ▲ Written to deny a request while still maintaining goodwill.

- A common format is:
  - Thank the reader for the request.
  - State and explain the refusal in a polite, positive manner.
  - Offer an alternative and provide specific information, if possible.
  - Close the letter using a positive tone.

Types of reports

- Informal reports are short reports in various forms.
  - A memorandum report is a short report used for interoffice communication.
  - A letter report is a short report written to someone outside the company.

- Formal reports are usually longer than informal reports. The more parts included in the report, the more formal the report.
  - Basic parts of a formal report
    - **Title page**—includes the author's name, date, title of the report, and, sometimes, the identification of the reader.
    - **Table of contents**—lists the headings and their beginning page numbers, as well as the parts of the report which appear before and after the body.
    - **Body**—presents the facts and information and discusses the objective/problem.
    - **Bibliography**—lists the references or sources used to prepare the report.
  - Supplementary parts
    - Title fly—lists only the title of the report.
    - Letter of transmittal—a message from the author to the reader.
    - Letter of authorization—the message that assigned responsibility of writing the report to the author.
    - Synopsis—a summary of the report.
    - Visual aids—illustrations that help communicate information graphically.

- Appendix—provides additional (but not vital) information at the end of a report.

Techniques for writing reports

☐ Preparing to write

- ▲ Determine the problem or purpose of the report.
    - Decide the scope of the problem (the range of the topic; how much information to include).
    - Set the limitations of the report (restrict what is to be included).
- ▲ Consider who will be reading the report and adjust the writing to the audience.
- ▲ Collect facts and data. Sources for facts might include library research, interviewing, surveys, other reports, etc.

☐ Outline facts and ideas

- ▲ Use an introduction, body, and conclusion/recommendations.
- ▲ Determine method of approach, such as inductive method or deductive method.

☐ Writing a report

- ▲ Use the outline as a guide.
- ▲ Use clear, concise, and objective style.
- ▲ Documentation: Give credit to the sources of information used in the report.
    - Footnotes are references printed at the bottom of the page referring to specific portions of the text on that same page.
    - Endnotes are references listed at the end of the report referring to specific portions of the text. Endnotes take the place of footnotes.
    - A bibliography is a complete listing of reference sources used to prepare a report.
- ▲ If the report is lengthy, prepare a table of contents which lists major headings/chapters and beginning page numbers.
- ▲ Visual aids may help communicate information. Visual aids might include bar graphs, pie charts, statistical tables, maps, etc.

- ▲ Reports may include a number of other parts.

- ☐ Proofreading and editing
  - ▲ Proofreading is the examination of printed text to mark errors which need correction. Special proofreader's marks are used.
  - ▲ Editing is the examination of printed text to determine clarity of wording, accuracy of information, and coherence. Editing requires the reader to analyze and judge the communication of the message.

ACTIVITY 1: TERMINOLOGY

Compose a sentence that correctly uses the following terms.

1. Active voice
2. Conjunction
3. Editing
4. Endnote
5. Interjection
6. Letter of transmittal
7. Limitation
8. Preposition
9. Projection
10. Scope
11. Synopsis
12. Tone

ACTIVITY 2: BUSINESS ENGLISH USAGE

Project 1

Use your word processing program to key in a sentence that illustrates an example for each of the following parts of speech. Bold that part of speech in each sentence.

1. Noun
2. Pronoun
3. Verb
4. Adjective
5. Adverb
6. Conjunction
7. Preposition
8. Interjection

Project 2

In the following two sentences, underline nouns once and verbs twice.

1. You should always keep your reader in mind when you write a letter.
2. The author of a letter should choose clear, concise words.

Project 3

Underline the correct verb in each sentence to make the subjects and verbs agree.

1. Every member of the committee (was, were) at the meeting scheduled last Thursday.

2. The records manager of First Federal Savings (is, are) scheduled to give a presentation at our next chapter meeting.

3. Neither Beth nor Sarah (is, are) responsible for that part of the annual report.

4. After a very lengthy trial, the jury (was, were) acknowledged as the newest law firm in our community.

5. Grayson and Sons, Inc., (was, were) acknowledged as the newest law firm in our community.

6. Five thousand dollars (was, were) awarded to the person supplying the information which led to the criminal's arrest.

7. Sixty minutes (is, are) not enough time to do the job well.

8. Economics (has, have) been very confusing to a number of people.

9. Bacon and eggs (is, are) one of my favorite breakfasts.

10. Every eligible man and every eligible woman (has, have) the right to vote in November's election.

Project 4

Using your word processing software, key in the sentences that are written in passive voice changing them to active voice. If no changes are required, place an A next to the sentence number.

_________ 1. The Technology Center will add several new exhibits next fall.

_________ 2. Leslie gave her best friend good advice.

_________ 3. The report was written by Ann Garza.

_________ 4. An article on word processing was completed by Mark.

_________ 5. The staff members have been informed by Al Lewis of the staff meeting scheduled for next Wednesday.

Project 5

If a plural or a possessive in the sentence below is incorrect as written, write the correct plural or possessive form in the adjoining blank. If the sentence is correct as written, write a C in the blank.

______________________ 1. Karla's performance at the Arts Festival was excellent.

______________________ 2. This summer we will conduct at least six more surveys.

______________________ 3. The businessmens' luncheon is being held in rooms 142 and 144.

______________________ 4. Because she has sixteen years' experience with this firm, Norma is very knowledgeable about our records management program.

______________________ 5. We extend many courtesies to our bank customers.

______________________ 6. Many familys will be together over the Christmas holidays.

______________________ 7. This city's water board just asked for a rate increase.

______________________ 8. That text book is the instructor's complimentary copy which she received from the publisher's representative.

______________________ 9. There are seven attorneys with the new law firm.

______________________ 10. Sams' radio can be heard throughout the house.

Project 6

Using your word processing software, key in the sentences that incorrectly use numbers and abbreviations and change them to the correct usage. If no changes are required, place a C beside the sentence number.

__________ 1. Melba Lester, M. D., is the one I would recommend.

__________ 2. The president of the firm is Howard P. Jacobson, Junior.

__________ 3. Mister Robert T. Simpson will be our guest speaker.

__________ 4. 34 people from Acme Products, Inc., will be attending the conference "Word Processing for Today."

__________ 5. Your plane reservation is for six o'clock.

__________ 6. A two-thirds majority is necessary to win the election.

__________ 7. On September seventh, we will begin working on next year's budget.

__________ 8. Please print 200 8-page booklets by next Wednesday.

__________ 9. Please send me two copies of Invoice 3429.

__________ 10. We expect 40 to 60 people to apply for the new sales manager's job that was just posted.

ACTIVITY 3: PUNCTUATION, CAPITALIZATION, AND SPELLING

Project 1

Carefully read each of the following sentences and add any necessary commas. Use proofreader's marks to indicate where the commas should be inserted.

1. Ronald Williams Sr. my supervisor told me that I would get a raise.
2. The report listed the large outstanding debts of the firm.
3. The tall thin spindly trees waved in the strong wind.
4. The receptionist Andy Youngblood does a good job of meeting the public.
5. Maureen will you get this letter in the mail this morning?
6. The reports were completed today and they will be mailed tomorrow.
7. In all there were 14 11 of which were faulty.
8. The box contained paper clips rubber bands, pins staples etc.
9. Yes I said that I would take responsibility for the failure.
10. When the training program is completed we will receive certificates.

Project 2

Carefully read each of the following sentences and add any necessary semicolons. Use proofreader's marks to indicate where the semicolons should be inserted.

1. The financial statement was completed the report to the stockholders was prepared.
2. We will prepare the stencils they will duplicate the report.
3. The job must be finished this week consequently, we will work overtime.
4. She did the best job she could nevertheless, it was not good enough.
5. Ms. Jones interviewed all the candidate thus, she was able to select the best qualified candidate.
6. William typed the reports, letters, and memos and he was always busy.
7. Mr. Doud reported an upswing in business but he reminded us of the inefficiency, waste, and disorganization that still existed.
8. She received the following: three invoices, each marked paid five statements, one containing an error and three letters, each with her name misspelled.
9. Hula hoops and bongo boards were once immensely popular today they are forgotten objects.
10. He knew that tickets for the concert would be scarce therefore, he arrived at the box office hours before it opened.

Project 3

Carefully read each of the following sentences and add any necessary underlines and quotation marks. Use proofreader's marks to indicate where the underlines and quotation marks should be inserted.

1. The title of the book was Some Went to War.
2. We will arrive at noon, Betty said.
3. She subscribed to Time, a weekly news magazine.
4. He felt the word nuclear was hard to pronounce.
5. Lennie Martin delivers the Daily Globe to our house.
6. Mary's speech, You Begin at the Bottom, was well received.
7. Of Hitchcock's movies, Psycho is the scariest.
8. That abbreviation means in the same place.
9. The author's stories have appeared in Redbook, Vogue, and Ms., among other magazines.
10. When, Bob asked, do you plan to leave?

Project 4

Carefully read each of the following sentences and add any necessary apostrophes. Use proofreader's marks to indicate where the apostrophes should be inserted.

1. The office managers office is near the elevator.
2. Jamess training lasted for six months.
3. The managers conference was very successful.
4. The instructor asked, "have you read the article Offices of the Future as you were assigned?"
5. We inserted thes, ands, and thats in the letter.
6. Paul and Maria received their M.B.A.s from Harvard.
7. I couldnt and wouldnt dampen the class enthusiasm.
8. It was Winston and Cartwrights first novel together.
9. Childrens clothes are sold only on the first floor of the store.
10. My fathers birthday was yesterday.

Project 5

Carefully read each of the following sentences and add any necessary colons and hyphens. Use proofreader's marks to indicate where the colons and hyphens should be inserted.

1. Mix the ingredients as follows sift the flour and salt together, add the milk, and slowly beat in the egg yolk.
2. The Pilgrims had one major reason for coming to the New World they sought religious freedom.
3. The vote carried by a two thirds margin.
4. My great grandfather is still driving a car.
5. He concluded with an ultimatum "Either improve the mass transit system or anticipate further decay in your downtown area."
6. The conference was a first class operation.
7. The competition will be held July 15 21.
8. The supervisor quoted first, second, and third class rates.
9. Two chief elements make work interesting first, the exercise of skill, and second, construction.
10. The meeting will be held in the boardroom at 1030 tomorrow morning.

Project 6

Carefully read each of the following sentences and add any necessary dashes and parentheses. Use proofreader's marks to indicate where the dashes and parentheses should be inserted.

1. The FTC Federal Trade Commission ruled that the advertising was misleading.
2. The Civil War period 1861-1865 was a difficult time for the country.
3. It was just yesterday or was it Friday that she called.
4. The party of the first part agrees to pay Five Hundred Dollars $500.
5. Miss Johnson an outstanding teacher recommended further training.
6. The masterpiece a Rembrandt was displayed in a prominent location.
7. To be promoted you must have: 1 a college degree, 2 three years of experience, and 3 good ratings from your supervisor.
8. A penny saved is a penny earned. Franklin
9. Some exotic pets monkeys and fragile breeds of dogs require too much care to be enjoyable.
10. The two brothers one tall and thin, the other short and stout look nothing alike.

Project 7

Carefully read each of the following sentences and add any necessary punctuation (commas, semicolons, hyphens, underlines, quotation marks, apostrophes, etc.). Use proofreader's marks to indicate where punctuation should be inserted.

1. One horizontal inch equals 12 elite spaces one horizontal inch also equals 10 pica spaces.
2. Claudia has lived in Dallas Texas New Orleans Louisiana and Tulsa Oklahoma.
3. The steps for typing all capital letters are as follows depress the shift lock type the words release the lock by touching the right shift key.
4. Although some paragraphs are single spaced other paragraphs may be double-spaced.
5. Our up to date textbook is easy to understand.
6. The rough draft copy of the book Writing Business Letters is almost complete.
7. The height of Ellens chair needs adjusting.
8. The companys mailroom is on the third floor and the presidents office is on the fifth floor.
9. Alex agreed to proofread the following two chapters Interoffice Memorandums and Two Page Reports.
10. A full sheet of 8½ by 11" paper has 66 lines a half sheet has 33 lines.

Project 8

Carefully read each of the following sentences and add any necessary capitalization. Use proofreader's marks to indicate where the capitalization should be inserted.

1. The new state house is very imposing. it is made of reflective glass and steel.

2. My grandmother told me stories about my father and uncle bill.

3. Although rashid is a moslem, he is very knowledgeable about the bible, especially the old testament.

4. Professor kellogg recommended that *sexist and non-sexist language* be a required text for all fall writing courses.

5. the photograph showed senator ertel shaking hands with the rabbi of the largest synagogue in florida.

6. The grand canyon is in arizona, not too far from phoenix.

7. Wayne colson m.d., knew his medicine, but his manner made his patients nervous.

8. Our scavenger-hunt map directed us two blocks southeast and two blocks northeast to find an old sink on elm street.

9. The suwannee river rises in the okefenokee swamp and moves through georgia and florida to the gulf of mexico.

10. The new saunders theater is an acoustical triumph, but, oh, it was expensive to build.

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Project 9

The following sentences may require punctuation and capitalization. Insert any missing punctuation marks and circle any letter which should be capitalized. Use proofreading marks to make the corrections, and then, using your word processing program, key in the sentences correctly.

1. In the fall I think I will take english history and typewriting.
2. Our marketing director robert thompson will be a guest speaker at marshall high school.
3. Before coming to san antonio president reagan stopped in dallas.
4. president reagan gave an interesting, lively speech on the middle east however he did seem tired from the traveling.
5. Next month miriam fitch president of fitch industries will be coming to kennedy high school to speak on job opportunities.
6. You will need the following supplies for the next math exam pencil paper and a calculator.
7. Our new class officers are mark morley president karen wilson vice president and andrew warner secretary.
8. Please open the window rhonda.
9. On wednesday march 12 our spanish club will take a trip to mexico city.
10. I can't remember who said to be or not to be that is the question.

Project 10

Write the plural form of each of the following words in the blanks below.

1. study ______________________________
2. motto ______________________________
3. year ______________________________
4. attorney ______________________________
5. gypsy ______________________________
6. church ______________________________
7. half ______________________________
8. alumnus ______________________________
9. scissors ______________________________
10. sheep ______________________________

Project 11

Combine the root word and its suffix. Correctly spell the resulting word. Add or take away letters as needed.

1. run + er ______________________________
2. wish + ed ______________________________
3. recur + ence ______________________________
4. like + able ______________________________
5. improve + ment ______________________________
6. malice + ious ______________________________
7. suspense + ion ______________________________
8. worry + ed ______________________________
9. advance + ment ______________________________
10. delay + ing ______________________________

Project 12

Circle those words which are spelled incorrectly.

1. recieve
2. anser
3. mispell
4. occassionally
5. temperature
6. enviroment
7. sovenir
8. alinment
9. paralel
10. psycological
11. guardian
12. thoroughly
13. beleive
14. lightening
15. Febuary
16. calendar
17. aisle
18. continuous
19. seige
20. nineth
21. developement
22. offerred
23. exceed
24. bachlor
25. extrordinary
26. jepardy
27. hygiene
28. resterant
29. surprise
30. victim
31. arguement
32. persuade
33. reenforce
34. achievement
35. practice
36. height
37. double
38. eigth
39. empty
40. patience
41. fourty
42. cemetary
43. exercise
44. moveable
45. reccommend
46. dilemma
47. fullfill
48. glamour
49. grammer
50. consience
51. allready
52. technique
53. occurrence
54. liesure
55. procedure
56. approximate
57. broshure
58. neither
59. unforgettable
60. column

ACTIVITY 4: WRITING BUSINESS DOCUMENTS

As program chairman of the Business Professionals of America of Reagan High School, you are responsible for obtaining a guest speaker for the October 20 dinner meeting. Members of the organization have suggested Dr. Nelda Martinez, and you have heard that she is an excellent speaker on the subject of automated office systems.

Write to Dr. Martinez at the University of Houston, Department of Technology, 1500 Maverick Drive, Houston, Texas 75123. Ask her to speak to your club for about thirty minutes on October 20, and invite her to be your guest for dinner at 7 p.m. in the dining room that adjoins the cafeteria. Tell Dr. Martinez that the program will start at approximately 8 p.m., and the meeting should adjourn by 9 p.m. Your organization is not able to pay speaking fees, but will pay travel expenses for her.

Project 1

Using the information at the top of the page and your handouts, compose, format, and key the first paragraph of a letter of request using any acceptable format. Proofread your work, and make any necessary corrections to produce a mailable document.

Project 2

Using the first paragraph you composed in *Project 1* and your handouts, compose, format, and key the second paragraph of a letter of request using any acceptable format. Proofread your work, and make any necessary corrections to produce a mailable document.

Project 3

Using paragraphs one and two from *Project 2* and your handouts, compose, format, and key the final paragraph of a letter of request using any acceptable format. Proofread your work, and make any necessary corrections to produce a mailable document.

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Project 4

Using the information below and your handouts, key in a letter of positive response using an acceptable format. Proofread your work and make any necessary corrections to produce a mailable document. You may also use the handout that explains the information included in a positive response letter.

Dr. Martinez is a strong supporter of the Business Professionals of America, and is happy to speak at the meeting on October 20. As Dr. Martinez, write a letter accepting the speaking engagement. You will need a slide projector and screen for your presentation, which is entitled "Office Information Systems of the Future". You will be able to join the organization for dinner before the meeting. Address the letter to (your name), Business Professionals of America, Reagan High School, 7204 Berkman Drive, Austin, Texas 78752.

Project 5

Using the information below and your handouts, key in a letter of negative response using any acceptable format. Proofread your work, and make any necessary corrections to produce a mailable document.

As Dr. Martinez, you are a strong supporter of the Business Professionals of America. However, you will be out of town attending a convention and will be unable to speak on October 20. You have been working closely with your colleague, Dr. Ming Chang, and you recommend her as a speaker for the group. Dr. Chang has been doing research on office information management techniques, and she has a dynamic and energetic personality. Or, perhaps you could speak to the group at a later date. Write a letter declining the invitation to speak. Suggest Dr. Ming Chang as an alternate. Address the letter to the same address as the letter of positive response.

Project 6

Using the information below and your handouts, key in a letter of goodwill using any acceptable format. Proofread your work, and make any necessary corrections to produce a mailable document.

As the secretary of the Business Professionals of America, write a letter to Dr. Martinez thanking her for speaking to your group. Her talk was very interesting, and the members of the club were challenged by her innovative ideas. Many expressed their desire to have Dr. Martinez speak to them again next year. Use the same address as the letter of request.

Project 7

Using the information given below and your handouts, compose and format a business letter using writing techniques and any acceptable format. Proofread your work, and make any necessary corrections to produce a mailable document.

You are an administrative assistant to Dr. James Young, director of Curriculum Technologies. Dr. Young is out of the office this week. In today's mail, he received a letter from a teacher requesting information for use in a graduate class report. The teacher would like data showing the projected sales for the year broken down by each project, and the projected dollar return from the actual contract amount for each project.

Since you know that Dr. Young considers this confidential information, and since his policy is to respond to requests for information within 24 hours, you must send the teacher a letter denying his request for information. The teacher is John Weaver. He had requested that the information be sent to him at 1020 East Olive Drive, Fort Worth, Texas 76134.

Project 8

Using the information provided by your instructor and your handouts, prepare a well-written informal report about what you learned about composition and about the types of business letters you composed in this unit.

SECTION 3

Business Communications

Unit 2: Telephone Techniques

Unit Objective: The students will describe and discuss telephone equipment, systems, features, and services using related terminology. Proper pronunciation, articulation, handling of incoming calls, and placing outgoing calls will be demonstrated.

Student Competencies: After completing this unit, the student will be able to:

1. Identify traditional telephone terminology.
2. Describe telephone equipment and systems.
3. Discuss special telephone features and services.
4. Demonstrate characteristics of good listening skills.
5. Apply good telephone pronunciation and articulation techniques.
6. Demonstrate positive techniques of handling incoming and placing outgoing telephone calls.

Focus: The telephone is one of the most vital pieces of equipment in any business. Without telephone service, every business could almost come to a standstill. A good telephone personality allows you to create a favorable image for both the business and yourself.

3-2 Telephone Techniques

Terminology

Audio teleconference	A conference that allows from three to hundreds of people to converse from different locations.
Call forwarding	A telephone feature available for purchase that allows the user to enter a code that will automatically transfer all incoming calls to another phone number.
Call waiting	Special telephone service available for purchase that provides a short tone signal indicating that a second call is on the line while you are on the phone with the first caller.
Centrex	A phone switching system in which users can choose between dialing directly or using the operator's assistance.
Channel	The connection between the sender and the receiver.
Collect call	Long distance telephone call in which the person or firm receiving the call agrees to pay the charge for the call.
Common carrier	An organization, such as the telephone company, that is authorized by the FCC to offer communication services.
Conference call	A telephone call that allows 2 to 50 people in different geographic locations to be connected on one telephone line simultaneously so they can participate in the same conversation.
Direct-dial calls	Method of placing long-distance telephone calls by following specific dialing instructions that do not require the assistance of an operator.
Direct outward dialing	A feature of an automated, private branch exchange which makes it possible to make outside calls directly by dialing an access number first.
Inward WATS	Special service available for purchase permitting station-to-station long-distance calls to be made to an organization without charge to the caller.

Key system	A type of telephone system in which the telephones have several buttons (or keys) that light up when the phones are in use.
Long distance file card	Form used to record specific information regarding a long-distance telephone call.
Operator-assisted call	Long-distance telephone call which requires assistance from the operator to complete the call.
Paging device	A small, portable device that alerts the person carrying it when someone is trying to reach him/her; often called a *beeper*.
Person-to-person call	An operator-assisted, long-distance telephone call in which the caller requests a particular person or extension.
Private branch exchange (PBX)	A telephone system consisting of an operator-controlled switchboard that is the central switching station for all the telephone extensions in an office.
Register of long-distance calls	Form used to record information pertaining to all long-distance telephone calls placed by an organization or department over a period of time.
Speakerphone	A combination microphone and loud-speaker device attached to a telephone which is designed so that several people can hear a telephone call together.
Station-to-station call	Long-distance telephone call which can be dialed directly.
Switched line	A line similar to a normal telephone line.
Teleconference	A conference conducted over the telephone among people in several different locations.
Teletypewriter	A keyboard device with a printer that can send and receive messages over telephone lines; **OR** a special machine, a form of telegraph similar to a typewriter, that is capable of both sending and receiving telegraphic messages.
Telex	Worldwide teletypewriter networks.
Tie-lines	Telephone connections that tie two telephones together directly. Generally, these are used between the main office and a branch office.

Wide area telephone service (WATS)	A special service available for purchase allowing a fixed charge to be paid for any number of long distance calls within a specified area, rather than paying for each long distance call individually.

Telephone equipment and systems

☐ Key telephone systems

- ▲ These systems are operated through push buttons which are connected to several telephone lines. The buttons light up when the phones are in use.
- ▲ Key systems are used in smaller offices that have 50 or fewer telephones where a central switchboard is not needed. Each station usually has intercom lines and a hold button.
- ▲ Several optional features are available for a fee.
    - Music for callers who are placed on hold.
    - Intercom conferencing.
    - Automatic routing of unanswered calls.
    - Restricted telephone access to long-distance lines.
- ▲ The call director has replaced the switchboard or console in many companies. It consists of 18 to 30 buttons, and the operator can direct calls to individual telephones.

☐ Cellular phone service first started in 1983, but only the very wealthy could afford this luxury. This type of phone is wireless and uses the same principles as a radio. The difference is that cellular phones have their power packs built within the unit.

- ▲ They are becoming more reasonable in price which allows almost anyone to afford this type of equipment.
- ▲ They can now use satellites to continue remote transmissions and the sound quality is becoming better.
- ▲ Computers can now be hooked-up to a cellular phone to transmit data from remote locations. Some problems still exist such as sound quality due to the geographic terrain or brief signal interruptions when the signal is "handed-off" to another connection point.

☐ A speakerphone is a combination microphone and loudspeaker device attached to a telephone.

- ▲ It allows the user to answer the telephone without lifting the receiver because the voice of the caller comes from a small loudspeaker on the desk or built into the phone.
- ▲ The user can talk and listen from any part of a specific office.
- ▲ Voices are monitored by a sensitive microphone which allows everyone in the office to hear and participate in the conversation.
- ▲ A major advantage of using a speakerphone is that it frees both hands to continue working or for taking notes. It is almost like speaking to a visitor in the office.

☐ Telephone networks

- ▲ Private Branch Exchange (PBX) and Private Automatic Branch Exchange (PABX).
    - These are self-contained switching systems between incoming and outgoing calls and calls between offices. Some systems can handle up to 10,000 lines and can be controlled by a microprocessor.
    - Software can be designed to meet the needs of individual companies.
    - Networking computers and PBXs can share the same wiring; however, the transmission speed is slower than that of a LAN (local area network).
    - Features available on a PBX include call waiting, call holding, reporting of calls made on each phone, call forwarding, economical routing of calls, and automatic callback which is a computerized feature that automatically calls a number again if the lines are busy.
- ▲ Centrex system
    - This system uses the local telephone company's central exchange and can call the extension number of the person you are calling without going through the switchboard. The caller also can access the company's switchboard which then transfers the call to the proper extension.
    - The system uses the local telephone company's central exchange.
    - Centrex service offers other services, such as call forwarding and higher-speed data transmission.
    - A major disadvantage of using this system is internal calls from one extension to another are routed through the central exchange which could allow a breach in data or call security.

- Types of special equipment
  - **Intelligent dialers**—store frequently-dialed numbers in memory and are equipped to dial numbers for you automatically. Some advantages are:
    - They eliminate looking up numbers or redialing long numbers.
    - They save time and eliminate the possibility of dialing a wrong number.
  - **Videophone/picture phone**—allows the person calling to be both seen and heard because the telephone is attached to a monitor, which can be turned on or off. A renewed interest has recently arisen which is due partially to the advanced technology of computers. Mass usage has been promised for 30 years or more, but it has never gained prominence.
  - **Personal signalers or pagers (beeper)**—small, portable devices that alert the carrier when someone is trying to reach him/her. Pagers are now being used in all types of businesses. Some pagers will print out the message and/or number of the caller.

Special telephone features and services

- Special telephone features
  - **Call waiting**—allows one call to be put on hold while answering an incoming call. A special tone signals when a call is coming in.
  - **Call forwarding**—allows incoming calls to be transferred to another number automatically.
  - **Speed dialing or calling**—allows the caller to access frequently used numbers that are stored in the memory of a computerized telephone by dialing a single designated number instead of the entire number.
  - **Conference calls**—allow several people at different locations to talk during one call. These calls are planned to ensure everyone is available.
  - **Automatic route selection**—selects the most economical route for the call to be processed.
  - **Call-timing**—provides a business with a record of the actual time calls were made in relation to a specific situation.
  - **Call restriction**—provides an authorization code for its users to keep an accurate record of calls made.

- ▲ **Call queing**—allows the person calling to wait on a busy extension until the extension is free.

- ▲ **Camp-on**—allows access to a busy line immediately after the line is free. The caller is called back at the same time the line is ringing the freed extension.

- ▲ **Direct inward dialing (DID)**—is a special service available for purchase that permits station-to-station long distance calls to be made to an organization without charge to the caller.

- ▲ **Direct outward dialing (DOD)**—is a feature of an automatic, private branch exchange that allows outside calls to be made by first dialing an access number.

- ▲ **Extended area service (EAS)**—provides an inexpensive rate for long distance calls made within a designated area.

- ▲ **Foreign exchange service (FX)**—allows a local number to be provided for a company not located in a city; therefore, the call is local not long distance.

- ▲ **Measured service**—allows businesses to pay for only the services that are used.

☐ Types of telephone services

- ▲ **Direct-distance dial (DDD) calls**—do not require operator assistance, but can be dialed directly. The rates are lower for these types of calls, and they are even lower during the early morning, evening, night, and weekend hours, based upon the call's point of origin. The types of DDD calls include:
    - **Credit card calls**—are similar to buying a product with a charge card. The card holder can make calls from any telephone in the U.S. or Canada to any other city, state, or country. The calls are billed to the telephone to which the card is assigned. Using the card provides a record of telephone expenses.
    - **Dial one-plus (station-to-station)**—is used when making a direct call and does not require operator assistance. The costs are less than any other type of call.

- ▲ **Operator-assisted calls**—require the caller to use an operator rather than directly dialing.
    - **Person-to-person calls**—are made when a specific person or extension is required. This type of call may cost twice as much as station-to-station calls because it is a special service. If the person who is being called is not available, there are no charges. If the person is available, the charges begin when the person, department, or extension is on the line.
    - **Collect calls**—are long-distance calls charged to the person receiving the call. This type of call can be placed station-to-station or person-to-person. The operator will ask the person who answers if he/she

    will accept the charges. That person must accept the charges before the call is put through.

    - **Third-number calls**—are used to place long-distance calls and transfer the charge to another telephone number. Since calling cards are predominantly used, this type of call is seldom used and, in many cases, the operator will not permit the call.

- Wide area telecommunications service (WATS/800 service)
  - This service enables the subscriber to place an unlimited number of calls up to a maximum number of usage hours for one monthly charge. WATS is a cost-effective way for businesses to operate. Two types of WATS lines are available.
    - **Inward WATS service**—enables the company to receive calls from anyone within the service areas selected. This service also allows customers to make calls to the company by dialing the toll-free 800 prefix rather than the area code.
    - **Outward WATS service**—enables the subscriber to make calls to any telephone in the service areas selected. The charges are based on the prevailing WATS rate rather than the long-distance rate. Fees are based on the distance outward from the company, and the distance is measured in bands.
  - **Tie-line service**—connects two sites and allows unlimited calls to be made between the two locations for a set fee.
  - **International calls**—use space satellites to make telephone connections. Some overseas calls may be dialed direct and tie-lines are generally used. Calls to Hawaii, Alaska, and Mexico are considered as overseas calls, but calls to Canada are considered regular long distance calls.

Listening skills

- Hearing and listening
  - Hearing means being able to detect sounds.
  - Listening is getting meaning and understanding from sounds.

- ☐ Good listening techniques
  - ▲ Getting ready to listen requires sitting up straight and being prepared to take notes.
  - ▲ Giving the speaker complete attention requires maintaining eye contact, concentrating on the speaker's ideas, not daydreaming, not talking, and not sketching or doodling.
  - ▲ Concentrating on the speaker's body language requires watching facial expression, observing gestures, and detecting vocal tones.
  - ▲ Listening for main points and ideas requires listening for repeated points and writing down each emphasized point.
  - ▲ After the speaker is finished, restate ideas or go over them again to help remember the ideas.
  - ▲ Ask questions.

Telephone techniques

- ☐ Projecting a favorable telephone image
  - ▲ Telephone communication allows an impression to be made only through hearing. The tone of the voice and what is said are two bases of interpretation. The level of understanding must be determined through verification.
  - ▲ Creating a good telephone image can be vital for the organization. The caller should be talked to rather than just talking to the phone. A smile can be conveyed over the phone by using polite phrasing. Show a sincere interest in the caller by using the caller's name, being a good listener, and avoiding talking to others while a person is waiting on the line. Using proper vocabulary and business-like expressions is vital. Slang should be avoided.
- ☐ Pronunciation and articulation techniques
  - ▲ Talk directly into the receiver so your voice can be heard clearly and distinctly.
  - ▲ Never chew gum or food, hum, eat, or smoke when talking on the telephone.
  - ▲ All words should be pronounced clearly, precisely, and spoken at a normal rate of speed.
  - ▲ The proper pitch is important. A low-pitched voice is preferable to a high-pitched voice. A high-pitched voice is often irritating to the person at the other end of the line.

- ▲ Expression and the tone of voice should be varied to convey meaning. Remember that goodwill is created when the tone of voice reflects courtesy and thoughtfulness.
- ▲ Use the phonetic alphabet when spelling names to promote better comprehension.

Incoming and outgoing calls

- ☐ Handling incoming telephone calls
  - ▲ Establish good office organization by arranging the telephone work area in an orderly manner.
    - Pens, pencils, message pads, and telephone directories should be secured.
    - Frequently used forms should be placed in a convenient location.
    - A list of frequently called numbers should be maintained.
    - A place for leaving messages should by designated.
    - Make sure you know how to use the telephone services and equipment correctly.
  - ▲ Answering procedures
    - Answer the telephone promptly, preferably after the first ring.
    - If using a switchboard, remember to depress the proper line button before lifting the receiver.
    - Greet the caller pleasantly, and provide the proper identification.
    - Obtain the name of the caller and the nature of the call for a person so that he/she can respond more intelligently.
    - Avoid long, detailed conversations.
    - Give an appropriate closing, and then let the caller hang up first. After the connection is broken, replace the receiver gently and securely.
  - ▲ Taking messages
    - A message pad should be kept readily available. The following information should be included on a message:
      - Time and date of the call.

    - Complete name of the caller and the company represented.
    - Telephone number of the caller, including the area code and extension.
    - What action should be taken.
    - Important details of the message should be summarized.
    - Your initials or signature.
  - Read the message back to the caller to make sure the message is correct.
  - Record all telephone calls, even if the call need not be returned.
  - Leave the messages in a designated area so they can be easily located.

☐ Placing outgoing telephone calls

▲ Types of calls

- Calling someone to whom your employer wishes to speak. Make sure your employer is ready to talk when the person answers.
- Leaving a message given to you by your employer. Make sure you understand the message your employer wants you to relay so you can explain it adequately and so there is no misunderstanding from the person receiving the call.

▲ Planning calls

- Write down the name of the person or organization being called, the information needed, and the questions to be asked.
- Have a copy of files or other pertinent information readily available.
- Obtain the telephone number from a personal phone index, the telephone directory, other special purpose directories, or through the use of directory assistance.
- Consider the time the call is being made, and call when the part is most likely to be available. Do not place a call during regularly scheduled lunch hours unless the call has been previously arranged. Consider the time zones when placing both domestic and international calls.

▲ Placing calls

- Carefully dial your party. When the phone is answered, identify yourself immediately.

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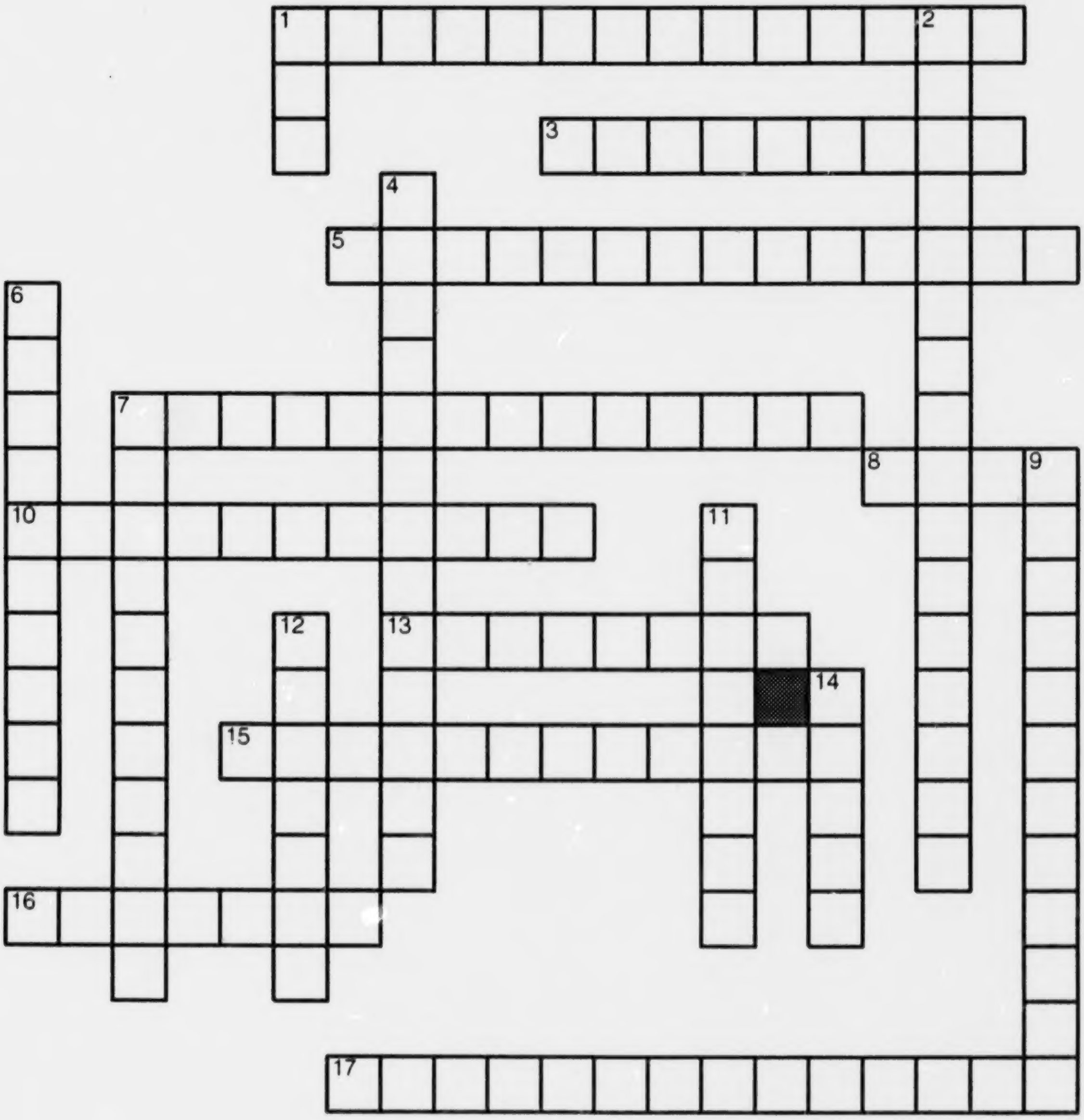
  - State the purpose of your call and provide the name of the person with whom you wish to speak.
  - Make sure the information you receive is complete so you will not have to call again.
  - Thank the party for the information and for his/her assistance.

- ▲ Long-distance calls should always be logged
  - Telephone records are needed for proper reimbursement and proper charging for long-distance calls. These records are helpful in double-checking the accuracy of telephone bills, estimating telephone expenses, or for justifying telephone expenses.
  - The following should be included in the long-distance log:
    - Date and time of the call.
    - The caller's name.
    - The telephone number called.
    - City and state called.
    - Name of person contacted.
    - Cost or approximate length of call.
    - Purpose of the call.
    - Initials of the person taking the call.
  - If using a long-distance file card as a register, the cards are filed chronologically. The calls on the cards are also in chronological order. The information from the cards is transferred to the register at the end of each month.

ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE



ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE CLUES

ACROSS

1. An operator-assisted, long-distance telephone call in which the caller requests a particular person or extension.

3. A type of telephone system in which the telephones have several buttons (or keys) that light up when the phones are in use.

5. A call that allows 2 to 50 people in different locations to be connected on one telephone line simultaneously so they can participate in the same conversation.

7. A telephone feature available for purchase that allows the user to enter a code that will automatically transfer all incoming calls to another phone number.

8. A special service allowing a fixed charge to be paid for any number of long-distance calls within a specified area, rather than paying for each call individually.

10. Long-distance telephone call in which the person or firm receiving the call agrees to pay the charge for the call.

13. Form used to record information pertaining to all long-distance telephone calls placed over a period of time.

15. A small, portable device often called a beeper.

16. A phone switching system in which users can choose between dialing directly or using the operator's assistance.

17. A conference conducted over the telephone among people in several different locations.

DOWN

1. A telephone system consisting of an operator-controlled switchboard that is the central switching station for all the telephone extensions in an office

2. Long-distance telephone call which requires assistance from the operator to complete the call.

4. An organization, such as the telephone company, that is authorized by the FCC to offer communication services.

6. Method of placing long-distance telephone calls by following specific dialing instructions that do not require the assistance of an operator.

7. Special telephone service available for purchase that provides a short tone signal indicating that a second call is on the line while you are on the phone with the first caller.

9. A combination microphone and loudspeaker device attached to a telephone which is designed so that several people can hear a telephone call together.

11. Telephone connections that tie two telephones together directly.

12. The connection between the sender and the receiver.

14. Worldwide teletypewriter networks.

ACTIVITIES 2-3: EQUIPMENT, SYSTEMS, FEATURES, AND SERVICES

Project 1

Write brief paragraphs to discuss at least four types of telephone systems and the specific equipment required for each system. Discuss several features and services that can be used with the system and equipment.

Project 2

Using the information in *Project 1*, create a poster with pictures, drawings, etc. showing different types of equipment. You may include brief paragraphs that explain features and services offered.

3-2 Telephone Techniques

Activities

ACTIVITY 4: LISTENING SKILLS

Listen to the short story read by your instructor. When finished, write down everything you remember.

ACTIVITY 5: PRONUNCIATION AND ARTICULATION TECHNIQUES

Working in pairs, create a conversation about the special services and features offered by your local phone company. Use a dictating machine to record your conversations. Make sure the conversation concerns business and that both persons project a positive and professional attitude.

3-2 Telephone Techniques

Activities

ACTIVITY 6: INCOMING AND OUTGOING TELEPHONE CALLS

Project 1

Write your responses of how you would handle each of the following situations. Fill out message forms or the long-distance log if necessary. Remember, you are a professional and you are projecting a positive attitude.

1. You are the receptionist for Fast Facts, a specialized telecommunications center. The phone rings at 8:30 a.m., and the person wishes to speak to the sales representative, Marilyn Paris. She is currently on another line. Raymond Wylie is calling about an error made on his order. His number is (817) 653-2155.

2. You are the executive secretary to Juanita Perez. The phone rings at 1:05 p.m. Ms. Perez has not returned from lunch, but you expect her shortly. Matt Hayes is requesting that Ms. Perez speak at the next meeting of Executives for America. He will call again at 3 p.m.

3. You have been requested to make a long-distance call to Portland, Oregon. You will need to speak to Mr. Robert Bryant, the sales representative. Mr. Bryant's number is (503) 796-5522 ext. 459. You have been authorized to request their catalog. You are located in Austin and the time is 1 p.m.

4. You have been requested by Mr. William Banks to call Mr. George Patterson at (213) 463-9952. Mr. Banks would like Mr. Patterson to speak at the next telecommunications conference held in New Orleans. The conference will be held in August, but the final dates have not been finalized.

Message

For ______________________________

From ______________________________

Date ______________ Time ______________

Phone No. ______________________________

Telephoned	☐	**Please call**	☐
Called to see you	☐	**Will call again**	☐

Message: ______________________________

____

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____

____

____

Call taken by ______________________________

Message

For ______________________________

From ______________________________

Date ______________ Time ______________

Phone No. ______________________________

Telephoned	☐	**Please call**	☐
Called to see you	☐	**Will call again**	☐

Message: ______________________________

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Call taken by ______________________________

Message

For ______________________________

From ______________________________

Date ______________ Time ______________

Phone No. ______________________________

Telephoned	☐	**Please call**	☐
Called to see you	☐	**Will call again**	☐

Message: ______________________________

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Call taken by ______________________________

Message

For ______________________________

From ______________________________

Date ______________ Time ______________

Phone No. ______________________________

Telephoned	☐	**Please call**	☐
Called to see you	☐	**Will call again**	☐

Message: ______________________________

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Call taken by ______________________________

BEST COPY AVAILABLE

Logging Long-Distance Telephone Calls

Date	Time	Caller's Name	Phone # Called	City	ST	Name of Person Contacted	Length of Call	Purpose	Init.

ACTIVITY 6: Continued

Project 2

For each of the following situations, write the steps you would take to plan the call and then place the call.

Situation

You are employed as an administrative assistant to Mr. Jackson Hayes, vice-president for Office Consultants, Inc. located in Houston, Texas. Mr Hayes is in charge of an office seminar to be held in Houston on March 5-8. As assistant, you have been given the responsibility of confirming the speaker's time of arrival for the conference. The program hours are from 9 a.m. to 4 p.m. Only two speakers have not confirmed their arrival times.

First Call

Sarah Granger, who will be speaking on office stress, lives in Tulsa, Oklahoma. She has tentatively decided that she will drive to Houston; however, Ms. Granger has been out of her office for a week and has left no indication of when she will arrive in Houston. Her secretary has said that she will be back to the office sometime after 2 p.m. today. You will need confirmation today so that hotel reservations can be finalized. Ms. Granger's number is (918) 542-7892.

Second Call

Ruby Gonzales, who will be speaking on sexual harassment, lives in Washington D.C. She has confirmed her arrival time; however, this morning you received a message from Ms. Gonzales that she had to cancel her flight. She is trying to reschedule for a later flight, but it seems that the only flight available will be on March 6 at 9 a.m. She would like her speech to be rescheduled for later that day or for the first session on March 7. Mr. Hayes has approved the rescheduling. Ms. Gonzales' number is (202) 882-4590.

SECTION 3

Business Communications

Unit 3: Transcription Techniques

Unit Objective: The students will discuss transcription media and equipment features and demonstrate efficient transcription techniques to transcribe mailable business documents from dictated tapes.

Student Competencies: After completing this unit, the student will be able to:

1. Identify and discuss transcription media and equipment features.
2. Demonstrate efficient transcription techniques.
3. Demonstrate the ability to transcribe mailable business documents from dictated tapes.

Focus: Transcription still plays a part in most offices. Not everyone has the ability nor the time to sit at a keyboard to compose and key in a document. People are still hired to enter documents from rough drafts and tapes. Learning this skill can help you when applying for entry-level positions in business.

Transcription Techniques 3-3

Terminology

Central dictation system	System in which the originator (dictator) uses a microphone or telephone that is hooked into the organization's word processing center. When the originator dictates into the system, the dictation is recorded on machines located in the word processing center, where it will later be transcribed.
Continuous keyboarding	Process of transcribing without stopping.
Desktop dictation unit	Conveniently sized dictation machines designed for in-office use. The machines are more sophisticated than portable models and can be used for both dictating and transcribing functions.
Dictation	The process of speaking or reading words for a machine or another person to record.
Dictation medium	The magnetic device on which dictation is recorded, such as a cassette, disk, cartridge, or endless loop tape.
Discrete equipment	Transcription equipment that uses a recording medium which can be removed from the dictation unit, placed in a transcription unit for playback, or filed for later use.
Editing skills	The ability to examine written material for accuracy, clarity, coherence, and effectiveness, and make revisions of the material as necessary.
Endless loop system	Uses a continuous loop of magnetic tape permanently enclosed in a tank to eliminate handling of the recording medium.
Index slip/electronic index	An indicator slip which has special markings to indicate the length of each item dictated, changes, or special instructions from the originator about recorded dictation. Also called electronic queing or scanning.
Keyboarding skills	The ability to record rapidly and accurately on paper or computer whatever material is to be transcribed.
Language arts skills	The ability to use language properly, including grammar, punctuation, sentence structure, and word usage.

Listening skills	The ability to pay attention, concentrate, and understand what is being said.
Logical thinking skills	The ability to determine information that is not needed or that has been omitted, and whether the message is clear and logical.
Originator	The person who dictates the material.
Portable dictation machines	Compact, easy-to-use dictation machines that are designed for dictation use while traveling, at home, or at a location different from your usual site. Portable units range in size from pocket models to units that fit in a briefcase.
Recording media	Magnetic supplies used to record and store information (i.e. floppy disk or cassette).
Remote dictation	Dictation recorded on a central dictation system when the originator and the recorder are stationed at different locations.
Scanner	Electronic queing device that notifies the transcriptionist of special information which allows the length of a document to be determined.
Transcription	The process of producing all information recorded by machine or manual/shorthand notes.
Transcription unit	A device used to play back recorded dictation for transcribing
Transcriptionist	The person who transcribes recorded words into another form.

Transcription equipment and features

- ☐ Discrete media equipment uses a recording medium which can be removed from the dictation unit and placed in a transcription unit for playback or filed for later use.
    - ▲ Types of discrete media equipment
        - Portable dictation unit—a self-contained, hand-held unit which enables the dictator to dictate material outside the office at any time; the recording medium is placed in a transcription unit to be transcribed.
        - Desktop unit—three styles are available: a dictation unit, a transcription unit, a combination unit with both dictation/ transcription capabilities.
        - Transcription unit—used by the transcriptionist to play back material for keying. This unit consists of a listening device (headset), foot pedal control, and playback unit.
    - ▲ Centralized endless loop dictating systems
        - This dictation equipment uses an endless loop of magnetic tape permanently enclosed in a tank to eliminate handling of the recording medium.
        - The recording unit and the transcription unit are connected by either private wires or telephone lines to the dictating devices, such as a microphone or a telephone, which are located at each dictator's desk.
- ☐ Features of equipment
    - ▲ The foot pedal is used to start, stop, and replay the dictation.
    - ▲ The headset is used to listen to dictation.
    - ▲ The indicator slip designates special instructions and displays the length of each item dictated.
    - ▲ The recall device is used to replay the last few words of the dictation automatically.

- ▲ The speed control device is used to increase or decrease the speed of dictation.
- ▲ The tone control device is used to adjust the pitch of the dictator's voice.
- ▲ The volume control device is used to control the loudness and softness of the dictation.
- ▲ Index slips are papers inserted into a slot on the transcriber. After completing the following process, the slip is removed and filed with the recording medium.
  - Markings at the top of the slip help the user determine the length of each letter, memo, or report.
  - Document lengths are determined by estimating the number of words between the marks which is approximately 100 words.
  - Marks at the bottom of the index slip are a message from the dictator indicating special instructions. All special instructions should be listened to prior to keying in the material. Messages may indicate a particular item needs to be rushed. That item should be keyed first. An instruction might modify or delete a document.
- ▲ Scanners help the transcriber rapidly locate the special instructions or the beginning of a particular document. The indicator should be set on 0 before beginning the dictation or transcription. As the transcription medium is played, the scanner automatically moves to the right. When the transcriber hears an electronic tone, this indicates that he/she should stop and listen to the information.

Efficient transcription techniques and procedures

☐ Transcription skills

- ▲ Listening—listen closely for phrases or sentences that do not make sense; consult the dictator when in doubt.
  - To improve listening skills, be attentive, listen carefully to what is being said, concentrate on the entire message, and if your mind starts to wander, bring it back immediately and concentrate.
  - If you still do not understand, ask questions, but limit your questions to the information that has not already been clarified and that is pertinent to you.
- ▲ Language arts—the ability to use language well, including grammar, punctuation, sentence structure, and word usage. Ways to improve your ability in this area include:

        - Take a writing course. Pay close attention in your high school English class and ask for help in writing areas that are difficult for you. If possible take a writing correspondence course, adult education course, or a course from a junior or senior college.
        - Listen carefully to the dictated material for clues from the dictator about where major punctuation marks should be inserted.
        - Use reference materials. Make sure that you have a set of reference materials nearby. These should include a dictionary, word division manual, thesaurus, and secretarial reference manual. It is important to check your work because many people judge the efficiency and reliability of your firm by the correctness and the tone of the correspondence they receive from you.
        - Whenever possible, have another person read over the transcript. This may not be possible if the material is confidential.
    - Thought units—listen to a group of words or phrases that makes up one logical thought, then key the thought. Develop the ability to determine whether information is not needed or has been omitted. Is the message clear and logical?
    - Continuous keyboarding—learn to depress foot pedal, listen, and keyboard without stopping. Developing this skill takes practice. Ways to improve your skills include:
        - Listen to the entire recorded document to be sure that you understand it before you begin transcribing the document.
        - Mentally insert punctuation and paragraphs as you listen.
        - Make letter mechanic adjustments as you go, inserting and deleting spaces on the correspondence when needed, so that the letter looks right on the page.
        - Use good judgment when placing tabulated material on the page. Try not to waste time on setup.
        - Proofread the document before removing it from the typewriter, or while it is on the screen before printing.

- Transcription procedures
    - The responsibilities of the transcriber include keyboarding, proofreading and editing, spelling, correct word usage, grammar, capitalization, paragraphing, punctuation, and following written and dictated instructions.
    - The work area should be neat and organized.
        - Organize work area and secure reference materials.
        - Preview the dictation for special instructions.

  - Determine the correct format for each item.
  - Adjust the volume, speed, and tone controls.

- Develop a transcription rhythm by listening to a group of words or a phrase, then stopping the recording, and keying in that group of words, then depressing the foot pedal and listening again.

- Verify confusing items by listening closely to the phrases or sentences that do not make sense. Listen to the sentences that precede and follow the confusing items. Consult with the dictator.

- Remember that problems may occur when transcribing, such as office noise and weak recordings. Your own health will affect how you hear.

- Proofread and edit the transcript carefully before and after printing it. Be able to use a variety of correction techniques according to the equipment you are using. Use a variety of resources to verify the mechanics.
  - A dictionary to check the meanings of words.
  - A word division manual to make sure words are properly divided.
  - A reference manual to check sentence structure and format.

ACTIVITY 1: TRANSCRIPTION MEDIA AND EQUIPMENT FEATURES

Write a brief paragraph on each of the following.

1. Portable dictation unit

2. Desktop unit

3. Transcription unit

4. Centralized endless loop dictating systems

5. Discuss the features of the transcription machine and what function each part performs. Be sure to use proper transcription terminology.

3-3 Transcription Techniques

Activities

ACTIVITY 2: EFFICIENT TRANSCRIPTION TECHNIQUES

Project 1

Dictate the letter provided by your instructor using good articulation and pronunciation. After dictating the letter, exchange tapes with another person in your class. Use the current date when transcribing the letter in block style format.

Project 2

After transcribing the dictated letter, use the word processing program to key in a brief critique (one to two paragraphs) of how the person dictating the letter sounded. Let the person know if articulation and pronunciation were clear and if any specific problems existed.

ACTIVITY 3: TRANSCRIBING MAILABLE DOCUMENTS

Obtain transcription tapes from your instructor. Using a transcription unit, transcribe the tapes, practicing the following transcription procedures:

1. Organize your work area.
2. Place the recording medium in the transcribing unit.
3. Turn the unit on.
4. Preview the dictation.
5. Listen to the first item to be transcribed.
6. Mentally punctuate the material.
7. Make notes on words to check for spelling and special instructions.
8. Adjust the volume, speed, and tone controls.
9. Determine the approximate length of the dictation in order to set margins.
10. Determine the correct format for each item to be prepared.
11. Transcribe the material according to priorities given by the dictator.

SECTION 4
Information Management Tools

Essential Elements 75.87 (c)(2)

(2) **Concepts and skills related to business information management. The student shall be provided opportunities to:**

- A. identify procedures for controlling manual records by applying terminology and procedures for indexing, coding, and filing alphabetically;
- B. identify and demonstrate procedures for automated management of business records, at least including use of database management software for storage, retrieval, manipulation, selection, and reporting of records; and
- C. identify business application of electronic spreadsheets and demonstrate fundamental concepts and operational procedures related to their use.

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Records Control 4-1

Lesson Plan

Essential Element: 75.87 (c)(2)(A)
Allocated Time: 10 Hours

Unit Objective: The students will demonstrate the ability to use ARMA filing rules and maintain control of manual records while using records management terminology.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology used in records management.
2. Demonstrate proper filing procedures.
3. Discuss micrographics and how it is used in records management.
4. Identify steps in transfer of files.
5. Demonstrate the ability to control manual records.

Focus: All businesses have some form of records. Many businesses use manual records management. Being able to maintain manual control of records is an excellent entry-level skill.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or affective domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

4-1 Records Control

Content Outline

Filing procedures

Alphabetic filing
Steps in alphabetic filing
Misfiling

Micrographics

Micrographics defined
Types of microforms

Files transfer

Types of files
Policy of file transfer
Transfer methods
Steps to transfer files

Teacher Activities

Teacher Preparation

- ☐ Preview the unit.
- ☐ Review unit objectives.
- ☐ Make instructional analysis.
- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or affective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Suggestions

☐ Make copies of the ARMA filing rules for your students.

☐ Use transparencies or the chalkboard for illustrations of the rules.

☐ Discuss the reasons for each rule.

☐ Illustrate the rules by using actual names from the class and the community to personalize the situation.

☐ Use the local telephone directory as a source of personal and business names.

☐ Contact local businesses and vendors for illustration of filing systems.

☐ A practice set or a textbook with alphabetical filing should be used for student practice materials. Practice sets are very important and effective. Be sure there is adequate practice for the information control cycle of filing, charge-out, and follow-up in the practice set or other simulated projects.

☐ Remind the students that the business they work for may use other rules. Consistency of use is the most important concept. It would be nice to convert an older arrangement to a new one; however, it may be too costly for some organizations to do immediately. Suggest to your students that instead of converting the old files, they establish any new files according to the new alphabetic filing rules. The rules that businesses use should be documented by the organization. This may be in the form of a list of alphabetic filing rules found in a handbook or records management book or in the office handbook.

☐ If you have students who are working, ask them to secure a list of the rules used in their office.

☐ Make sure the students are aware of the problems caused by misfiling. Discuss the importance of accurate filing.

☐ Visit a company's file department. Have the person in charge of records management explain the operations used and any special procedures that they follow.

- ☐ The simulation for this section is *Ski-On The Edge*. A portion of this simulation can be used with this unit. The additional part is to be used with the database unit. You can use this as a culmination activity of both this unit and the next unit. The simulation stresses records and database management. Refer to the special products pages located at the front of this book for additional simulations that can be used if this course is the only office education course taught at your school.

- ☐ Remember to use the *Test Builder Program* and the related test bank.

Activity 2

Projects 1 & 3

Cut paper into 3" x 5" pieces and distribute about 50 pieces to each student to complete the projects.

You may wish to have alphabetic guides. Use guides left over from old practice sets, or cut colored paper that is slightly larger than the 3" x 5" card stock and have students prepare guides from these sheets. It will be easier to distinguish between each class's work if a different color is used for each class.

Provide the students with two No. 6 envelopes: one to hold unused cards, and the other to hold their current project and guides. If desired, an additional No. 10 envelope or provide a small manila envelope for students to keep all of their materials in. Make sure that the students write their names on the outside of each envelope used.

Competency Test

Part 1 Be sure that all instructions have been followed so the students will receive full credit for the test.

Parts 2-3 You may want the students to either key in their answers using word processing or write their answers out.

Rules for Alphabetic Filing*

The following seven rules provide consistency in simplified filing.

1. Alphabetize by arranging files unit-by-unit and letter-by-letter within each unit.
2. Each filing unit in a filing segment should be considered. This includes prepositions, conjunctions, and articles. The only exception is when the word **the** is the first filing unit in a filing segment. In this case, **the** is the last filing unit. Spell out all symbols, e.g., &, $, #, and file alphabetically.
3. File "nothing before something." File single unit filing segments before multiple unit filing segments.
4. Ignore all punctuation when alphabetizing. This includes periods, commas, dashes, hyphens, apostrophes, etc. Hyphenated words are considered one unit.
5. Arabic and Roman numbers are filed sequentially before alphabetic characters. All Arabic numerals precede all Roman numerals.
6. Acronyms, abbreviations, and radio and television station call letters are filed as one unit.
7. File under the most commonly used name or title. Cross-reference under other names or titles that might be used in an additional request.

Personal Names

1. **Simple Personal Names**
   Use the last (surname) as the first filing unit. The first name or initial is the second filing unit. Subsequent names or initials are filed as successive units.
2. **Personal Names with Prefixes**
   Surnames that include a prefix are filed as one unit even if the prefix is followed by a space. Examples of prefixes are: D', Da, De, Del, De la, Della, Den, Des, Di, Du, El, Fitz, L', La, Las, Le, Les, Lo, Los, M', Mac, Mc, O', Saint, St., Ste., Te, Ten, Ter, Van, Van de, Van der, Von, Von der.
3. **Personal Names with Personal and Professional Titles and Suffixes**
   Suffixes are not used as filing units except when needed to distinguish between two or more identical names. When needed, a suffix is the last filing unit and is filed as written, ignoring punctuation.

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*Taken from 1989-1992 Business Professionals of America Competitive Events Guidelines, p. 65 (Association of Records Managers and Administrators, Inc., 4200 Somerset Drive, Suite 215, Prairie Village, KS 66208).

4. **Personal Names which are Hyphenated**
   Ignore the hyphen and file the two names as one unit.

5. **Pseudonyms and Royal, Religious Titles**
   Pseudonyms are filed as written. Personal names that start with a royal or religious title and are followed by only a given name(s) are filed as written.

6. **Foreign Personal Names**
   If the surname is identifiable, file the name as any other personal name is filed. If there is a question about the surname, use the last name as the first filing unit and make a cross-reference from the first name.

7. **Nicknames**
   When a person commonly uses a nickname as a first name, file using the nickname. Cross-reference from the given name only if necessary.

Business Names

When the same filing segment is applicable to more than one location, filing order is determined by an identifying location. In the case of banks, unions, etc., this location may be a branch, local number, post, etc. For most businesses, it will be an address. When using an address, cities are considered first, followed by states or provinces, street names, house number or building number in that order.

Address Arrangement

When the first units of street names are written as the figures, the names are considered in ascending numeric order and placed together before alphabetic street names.

Street names with compass directions are considered as written. Numbers after compass directions are considered before alphabetic names (East 8th, East Main, Franklin, SE Eighth, Southeast Eight, etc.)

If a filing unit within an address is not necessary for identification, it does not have to be used.

Business and Organization Names

1. Business and organization names are filed as written using the business letterhead or trademark as a guide. Names with prefixes follow the example for personal names with prefixes.

   Note: When necessary to ensure information retrieval, cross-reference between acronyms and the complete name.

2. Subsidiaries of businesses will be filed under their own name with a cross-reference to the parent company if needed.

3. Place names in business names will follow the standard rule that each word/filing unit is treated as a separate filing unit.

4. **Compass Terms In Business Names**
   Each word/unit in a filing segment containing compass terms is considered a separate filing unit. If the term includes more than one compass point, treat it as written. Establish cross-references as needed.

Governmental/Political Designations

When filing governmental/political materials, the name of the major entity is filed first followed by the *distinctive* name of the department, bureau, etc.

This rule covers all governmental/political divisions, agencies, departments, committees, etc., from the federal to the county/parish, city, district, and ward level.

Federal
Prefix with the name of the government and eliminate the department, i.e., Department of the Interior, Department of the Treasury, etc., file titles of the office, service, bureau, etc., by their distinctive names.

United States Government
  Coast Guard

United States Government
  Environmental Protection Agency

United States Government
  Forest Service

United States Government
  Interstate Commerce Commission

State and Local
State, county, parish, city, township, and village governmental/political divisions are filed by their distinctive names. The words "county of," "city of," "department of," etc., if needed and as appropriate, are needed for clarity and are considered filing units.

Note: If "of" is not part of the official name as written, it is not added.

Foreign Governments

The distinctive English name is the first filing unit. If needed, the balance of the formal name of the government forms the next filing unit(s). Divisions, departments and branches follow in sequential order, reversing the written order where necessary to give the distinctive name precedence in the filing arrangement.

States, colonies, provinces, cities, and other divisions of foreign governments are filed by their distinctive or official names as spelled in English. Cross-reference written name to official native name where necessary.

Note: A current copy of *The World Almanac and Book of Facts* is an excellent reference for the translation of foreign names into English and for clarification of relations between governments. Another source is the book *Countries, Dependencies and Areas of Special Sovereignty* published by U.S. Dept. of Commerce, National Bureau of Standards, Institute of Computer Sciences & Technology, Gaithersburg, MD 20899.

Matrices

ACTIVITY MATRIX

Activities	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1	X				X	
2 Project 1	X				X	
Project 2	X		X		X	
Project 3	X				X	
Project 4	X		X		X	
3	X				X	
4	X				X	

COMPETENCY TEST MATRIX

Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
I Project 1	X			X	X	
Project 2	X			X	X	
II	X				X	
III	X				X	
	X					

Records Control 4-1

Competency Test

PART 1: ALPHABETIC FILING

Project 1

Using the following personal names, place each name properly coded on the attached answer sheet. Be sure to place each unit in its proper place on the answer sheet. After coding each name, alphabetize the names by placing the appropriate number on the space provided.

1. Rev. Baker Porter-James
2. Mrs. Annamae Johnson
3. Sister Anne
4. Robert March, Jr.
5. Robert March, II
6. Robert March, Sr.
7. Robert March
8. Philip McDonald
9. Helena DeGarza
10. Betty M. Simmons
11. Betty Simmons
12. Dr. James L. Sullivan
13. Nora Rowe
14. Anthony MacDonald
15. Shawn Raymond
16. Karen Row
17. Misty Murray
18. Jammie Patton
19. Shelly Baron
20. J. Patton

Project 1

No.	1st Unit	2nd Unit	3rd Unit	4th Unit

Project 2

Using the following business names, place each name properly coded on the attached answer sheet. Be sure to place each unit in its proper place on the answer sheet. After coding each name, alphabetize the names by placing the appropriate number on the space provided.

1. The Money Store
2. Tru-Value Hardware
3. Trudy's Hair Salon
4. Mesa Airlines
5. Park Cities Cleaners
6. Baker & Baker, Inc.
7. Mexicana Airlines
8. Globe Trotter Travel Agency
9. Northwest Enterprises
10. North West Travel Agency
11. Fourth Avenue Dry Cleaners
12. James K. Wilson's Auto Repair
13. Thomas Lynn Cake Decorators
14. Write Soft Computer Consultants
15. Soft Edge Computer Training
16. Sew 'n Stuff
17. Yards of Yardage
18. West Publishing Company
19. La Fiesta Mexican Cuisine
20. Fuel Stop

Project 2

No.	1st Unit	2nd Unit	3rd Unit	4th Unit

PART 2: MICROGRAPHICS

Discuss each of the following in a brief paragraph.

1. Microfilm

2. Microfiche

3. Ultrafiche

4-1 Records Control

Competency Test

PART 3: FILE TRANSFER

Using complete sentences and proper grammar, write a short essay discussing two of the following:

1. The types of records
2. The policy governing how long to maintain the records
3. Two types of transfer methods
4. The four steps used to transfer files.

Activity Answers

Activity 1

```
                              P
        I N D E X I N G       E
                  N           R
  I N D I V I D U A L     U N I T S   I
                  C           O       N
                  T           D       S
C H R O N O L O G I C A L     I   F   P
    E             V   R     A C T I V E
F O L L O W U P   E   M     L     L   C
    E                 A     P     I   T
  C A P T I O N   C         H     N   I
    S             H         A     G   N
  K E Y U N I T   A         B         G
    M             R E T R I E V A L
    A             G         T
  C R O S S R E F E R E N C I N G
    K   T         O         Z
        O         U   C O D I N G
        R         T         N
P E R P E T U A L           G
```

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Activity 2

Project 1 Evaluated to the satisfaction of the instructor.

Project 2

1. Charles Adamly
2. L. C. Anderson
3. Elizabeth Aston-Sullivan
4. Jimmy Belton
5. (Mrs.) Sandra Bennett Brock (William Marcus)
6. (Mrs.) Roma Jean Brockman (J. C.)
7. Paul H. Bronman
8. Brown
9. John Henry Brown
10. Jefferson Brownley
11. Doris Burk, 9501 Ramblewood, Austin, TX 78745
12. Doris Burk, 1808 Stanley, Austin, TX 78745
13. Tran Cahn
14. Lynda De la Rosa
15. Paul H. Looney, Sr.
16. Paul H. Looney, III
17. S. Browning Martinez
18. Carol O'Sullivan
19. Susan St. James
20. Sister Beatrice

Project 3 Evaluated to the satisfaction of the instructor.

Project 4

1. 6 Motel
2. 6th Street Cafe
3. ABC Florist
4. Austin, City, Utilities Department
5. First Baptist Church
6. (The) In Town Inn
7. KVET Radio Station
8. Willie Kocurek Elementary
9. Mrs. Johnson's Bakery
10. New York Journal—Dallas
11. New York Journal—New York
12. Owens-Baker Auto Supply
13. San Antonio, City, Power and Light
14. Southwestern Airlines
15. South-Western Publishing Co.
16. Texas Commerce Bank—Barton Creek
17. Texas Commerce Bank—Northcross
18. Tres Amigos Restaurant
19. United States Government, Internal Revenue Service
20. Woodmen of the World

Activity 3

Evaluated to the satisfaction of the instructor.

Activity 4 Evaluated to the satisfaction of the instructor. The following may be used as a guideline.

1. **Vital records**—are necessary to the operation of business. They are irreplaceable if destroyed and should never be transferred.

   Important records—facilitate the operation of business. These records can be replaced at great cost if destroyed and can be transferred to inactive files if kept in good condition.

   Useful records—are temporarily helpful in the operation of business. They can be replaced at a slight cost if destroyed. These records can be destroyed after three or four years.

   Nonessential records—are temporarily useful in the operation of business. They generally are destroyed after temporary use.

2. **Periodic transfer**—is the removal of records at stated intervals. Removal of all files to inactive storage is required and new folders are set up. Variations of the method exist.

   Perpetual transfer—is the continual transfer from active to inactive files. This method is used by businesses who have difficulty setting definite periods for transfer. Normally, contractors, architects, and lawyers use this method.

3. The steps to transfer files are:

   Prepare list of correspondents who will need new folders.

   Type labels for new folders.

   Assemble transfer box for storage of records.

   Destroy previously transferred records if they are no longer needed. Make sure the authority to destroy the records is in writing.

Competency Test Answers

Part 1

Project 1

13	Porter-James	Baker	Rev.	
3	Johnson	Annamae	Mrs.	
19	Sister	Anne		
6	March	Robert	Jr.	
5	March	Robert	II	
7	March	Robert	Sr.	
4	March	Robert		
9	McDonald	Philip		
2	DeGarza	Helena		
18	Simmons	Betty	M.	
17	Simmons	Betty		
20	Sullivan	James	L.	Dr.
16	Rowe	Nora		
8	MacDonald	Anthony		
14	Raymond	Shawn		
15	Row	Karen		
10	Murray	Misty		
12	Patton	Jammie		
1	Baron	Shelly		
11	Patton	J.		

Project 2

9	Money	Store	The	
17	Tru-Value	Hardware		
16	Trudy's	Hair	Salon	
7	Mesa	Airlines		
12	Park	Cities	Cleaners	
1	Baker	and	Baker	Inc.
8	Mexicanna	Airlines		
4	Globe	Trotter	Travel	Agency
11	Northwest	Enterprises		
10	North	West	Travel	Agency
2	Fourth	Avenue	Dry	Cleaners
5	James	K.	Wilson's	Auto Repair
15	Thomas	Lynn	Cake	Decorators
19	Write	Soft	Computer	Consultants
14	Soft	Edge	Computer	Training
13	Sew	'n	Stuff	
20	Yards	of	Yardage	
18	West	Publishing	Company	
6	La	Fiesta	Mexican	Cuisine
3	Fuel	Stop		

Parts 2-3 Evaluated to the satisfaction of the instructor.

Lesson Plan

Essential Elements: 75.87 (c)(2)(B)
Allocated Time: 10 Hours

Unit Objective: The students will create, manipulate, and print data using database software. Exporting data will also be demonstrated.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology related to database management.
2. Demonstrate proper procedures to create, enter, store, and retrieve information from a database.
3. Print reports and information from the database.
4. Demonstrate the ability to export information from the database software and import the data into a word processing document.

Focus: Many businesses have converted to computer-based records management. Knowing database procedures gives you an added skill that is helpful when applying for employment.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or affective domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

4-2 Database

Content Outline

Designing/creating a database

Planning the organization of the database
Designing forms
Formatting fields

Data entry/output

Using a database
Output

Database 4-2

Teacher Activities

Teacher Preparation

- ☐ Preview the unit.
- ☐ Review unit objectives.

Make instructional analysis.

- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or affective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Suggestions

- ☐ Become familiar with information management software.
- ☐ Prepare transparencies to illustrate the command categories common to databases.
- ☐ Select assignments or prepare additional assignments to reinforce work within a database.
- ☐ Develop a list of database examples, including some which relate to students' interests.
- ☐ Make printouts and/or transparencies of sample databases.
- ☐ Identify reference manual sections that will be useful to the students.
- ☐ Select exercises and drills from resources to complete the section.
- ☐ The simulation for this unit is *Ski-On The Edge*. Use the database portion of the simulation. You can use this as a culmination activity or test for this unit and for the records management unit or save it for the course closure. Refer to the special products pages located at the front of this book for additional simulations that can be used if this course is the only office education course taught at your school.
- ☐ Remember to use the *Test Builder Program* and the related test bank.

Activity 2

Project 1 Tell the students to enter the last name first so that the name will print in alphabetical order. You may also wish to separate the NAME field into FIRST and LAST name fields.

Project 3 Tell the students to enter the last name first so that the name will print in alphabetical order. You may also wish to separate the NAME field into FIRST and LAST name fields.

Activity 4 In this activity the students will be exporting data from the database and importing the data into a word processing program. You may want to review procedures of how to format labels. You may also need to prepare any necessary specific instructions for exporting data from your software. Students will use the labels in the competency test.

Matrices

ACTIVITY MATRIX						
Activities	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1	X				X	
2 Project 1	X	X		X	X	
Project 2	X	X		X	X	
Project 3	X	X		X	X	
3 Project 1	X	X		X		
Project 2	X	X		X	X	
Project 3	X	X		X		
Project 4	X	X		X	X	
Project 5	X	X		X		
4	X	X		X	X	X

COMPETENCY TEST MATRIX						
Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
	X	X		X	X	

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Competency Test

Perform each of the following activities to design, create, print, and export data from the database.

1. Design and then create the database using the following fields:

   TITLE OF BOOK
   TYPE OF APPLICATION
   PUBLISHER

2. The following data will be used:

   Guide to WordPerfect for Windows, Word Processing, PC Magazine
   Mastering Microsoft Word, Word Processing, Sybex
   Guide to Using NetWare, Networks, PC Magazine
   Guide to Connectivity, Networks, PC Magazine
   Guide to 1-2-3: Release 2.3, Spreadsheet, PC Magazine
   The Student Edition of Lotus 1-2-3, Spreadsheet, Addison-Wesley
   Learning Lotus 1-2-3, Spreadsheet, Houghton Mifflin
   Using Lotus 1-2-3, Spreadsheet, Houghton Mifflin
   Applying WordPerfect 5.1, Word Processing, Houghton Mifflin
   Using Professional Write Plus for Windows, Word Processing, Que
   Using Paradox 3.5, Database, Que
   1-2-3 Beyond the Basics, Spreadsheet, Que
   Using FoxPro, Database, Que
   dBASE IV 1.1 QuickStart, Database, Que
   Using Dataease, Database, Que
   The Best Book of WordStar Second Edition, Word Processing, Sams
   Lotus 1-2-3 Step-by-Step, Spreadsheet, Sams
   Quattro Pro in Business, Spreadsheet, Sams
   10 Minute Guide to Q & A, Database, Sams
   dBASE IV: A Practical Learning Guide, Database, Paradigm
   Database Productivity: Exercises and Applications, Database, Paradigm

3. Print the following hardcopies:
    - Alphabetical by title of book (print all fields)
    - Type of application (print only title)
        1) Database
        2) Spreadsheet
        3) Word Processing
        4) Networks
    - Listing by publisher (print only publisher and title)
4. Export only the records that concern databases. Import the data into your word processing program and perform a mail merge. Use the letter on the next page.

    Use the mailing labels from *Activity 4*.

(Current date)

Dear preferred customer:

Thank you for your recent inquiry about information on databases. We are sorry for any inconvenience this delay of information has caused you; however, since our new warehouse is almost complete we are offering the following books for a 25% discount off the cover price.

(data for database books will be imported here)

The price list is located at the back of the enclosed catalog. If you need further assistance, feel free to contact us.

Sincerely,

Margaret O'Brien
Sales Supervisor

xx

Enc.

Activity Answers

Activity 1

```
D A T A B A S E
E         R           F I N D
L     H A R D C O P Y   N
E         A             S
T     F U N C T I O N K E Y S
E     O   G             R
      R   E   F I E L D T Y P E
      M       I             R
      D A T A E N T R Y   F I L E
      E       L             N
      S   F   D             T
U   F I E L D N A M E   F   S     I
P     G   O   A         I   C     N
D     N   O   M         E   R     P
A         P   E         L   E     U
T     V   Y   F I E L D L E N G T H
I     I   D                 N
N U M E R I C F I E L D
G     W   S
          K
```

Activity 2

Projects 1-3 Evaluated to the satisfaction of the instructor.

Activity 3

Project 1

Student Name: Dorie Copeland
Address: 1112 Easthave Drive
City: Pasadena
State TX
ZIP Code 77504

Student Name: Paul C. Davis
Address: Apt. 16, 202 Crockett
City: Austin
State TX
ZIP Code 78704

Student Name: Kenneth C. Dozier
Address: 1108 Montana Drive
City: Abilene
State TX
ZIP Code 79331

Student Name: Lee Johnson
Address: 9501 Martindale Road
City: Muleshoe
State TX
ZIP Code 79003

Student Name: Leigh Ann Johnston
Address: 331 Buckskin Pass
City: Austin
State TX
ZIP Code 78745

Student Name: Robert LaMonine
Address: Suite 102
First City Nat. Bank Bldg.
City: Houston
State TX
ZIP Code 77002

Student Name: Belinda Luther
Address: 10800 Lamar Street
City: Austin
State TX
ZIP Code 78757

Student Name: Linda McDonald
Address: 2326 South 39th Street
City: Dime Box
State TX
ZIP Code 79605

Student Name: Sandra Sue Patterson
Address: 702 Randall Street
City: Pasadena
State TX
ZIP Code 77506

Student Name: George C. Scott
Address: 1112 Easthaven Drive
City: Pasadena
State TX
ZIP Code 77504

Project 2

Alphabetic listing by last name

Student Name: Dorie Copeland
Address: 1112 Easthave Drive
City: Pasadena
State TX
ZIP Code 77504

Student Name: Paul C. Davis
Address: Apt. 16, 202 Crockett
City: Austin
State TX
ZIP Code 78704

Student Name: Kenneth C. Dozier
Address: 1108 Montana Drive
City: Abilene
State TX
ZIP Code 79331

Student Name: Lee Johnson
Address: 9501 Martindale Road
City: Muleshoe
State TX
ZIP Code 79003

Student Name: Leigh Ann Johnston
Address: 331 Buckskin Pass
City: Austin
State TX
ZIP Code 78745

Student Name: Robert LaMonine
Address: Suite 102,
First City Nat.Bank Bldg.
City: Houston
State TX
ZIP Code 77002

Student Name: Belinda Luther
Address: 10800 Lamar Street
City: Austin
State TX
ZIP Code 78757

Student Name: Leon Morrow
Address: One Silver Fox Drive
City: Dallas
State TX
ZIP Code 72033

Student Name: Linda McDonald
Address: 2326 South 39th Street
City: Dime Box
State TX
ZIP Code 79605

Student Name: Sandra Sue Patterson
Address: 702 Randall Street
City: Pasadena
State TX
ZIP Code 77506

Student Name: Marie Schmidt-Fox
Address: 513 Blueberry Road
City: Dallas
State TX
ZIP Code 72051

Student Name: George C. Scott
Address: 1112 Easthaven Drive
City: Pasadena
State TX
ZIP Code 77504

Alphabetic listing by city

Student Name: Kenneth C. Dozier
Address: 1108 Montana Drive
City: Abilene
State TX
ZIP Code 79331

Student Name: Paul C. Davis
Address: Apt. 16, 202 Crockett
City: Austin
State TX
ZIP Code 78704

Student Name: Leigh Ann Johnston
Address: 331 Buckskin Pass
City: Austin
State TX
ZIP Code 78745

Student Name: Belinda Luther
Address: 10800 Lamar Street
City: Austin
State TX
ZIP Code 78757

Student Name: Leon Morrow
Address: One Silver Fox Drive
City: Dallas
State TX
ZIP Code 72033

Student Name: Marie Schmidt-Fox
Address: 513 Blueberry Road
City: Dallas
State TX
ZIP Code 72051

Student Name: Linda McDonald
Address: 2326 South 39th Street
City: Dime Box
State TX
ZIP Code 79605

Student Name: Robert LaMonine
Address: Suite 102,
First City Nat. Bank Bldg.
City: Houston
State TX
ZIP Code 77002

Student Name: Lee Johnson
Address: 9501 Martindale Road
City: Muleshoe
State TX
ZIP Code 79003

Student Name: Dorie Copeland
Address: 1112 Easthave Drive
City: Pasadena
State TX
ZIP Code 77504

Student Name: Sandra Sue Patterson
Address: 702 Randall Street
City: Pasadena
State TX
ZIP Code 77506

Student Name: George C. Scott
Address: 1112 Easthaven Drive
City: Pasadena
State TX
ZIP Code 77504

Numeric listing by ZIP code

Student Name: Leon Morrow
Address: One Silver Fox Drive
City. Dallas
State TX
ZIP Code 72033

Student Name: Marie Schmidt-Fox
Address: 513 Blueberry Road
City: Dallas
State TX
ZIP Code 72051

Student Name: Robert LaMonine
Address: Suite 102,
First City Nat. Bank Bldg.
City: Houston
State TX
ZIP Code 77002

Student Name: Dorie Copeland
Address: 1112 Easthave Drive
City: Pasadena
State TX
ZIP Code 77504

Student Name: George C. Scott
Address: 1112 Easthaven Drive
City: Pasadena
State TX
ZIP Code 77504

Student Name: Sandra Sue Patterson
Address: 702 Randall Street
City: Pasadena
State TX
ZIP Code 77506

Student Name: Paul C. Davis
Address: Apt. 16, 202 Crockett
City: Austin
State TX
ZIP Code 78704

Student Name: Leigh Ann Johnston
Address: 331 Buckskin Pass
City: Austin
State TX
ZIP Code 78745

Student Name: Belinda Luther
Address: 10800 Lamar Street
City: Austin
State TX
ZIP Code 78757

Student Name: Lee Johnson
Address: 9501 Martindale Road
City: Muleshoe
State TX
ZIP Code 79003

Student Name: Kenneth C. Dozier
Address: 1108 Montana Drive
City: Abilene
State TX
ZIP Code 79331

Student Name: Linda McDonald
Address: 2326 South 39th Street
City: Dime Box
State TX
ZIP Code 79605

Project 3

Alphabetic listing by food

Food: Apple (fresh unpeeled)
Portion: 1 med.
Calories: 80
Carbohydrates: 20
Protein: Trace
Fat Grams: Trace
% of Fat: 11

Food: Big Mac hamburger
Portion: 1
Calories: 541
Carbohydrates: 39
Protein: 26
Fat Grams: 31
% of Fat: 52

Food: Cornbread
Portion: 2 oz.
Calories: 170
Carbohydrates: 22
Protein: 4
Fat Grams: 5
% of Fat: 26

Food: Filet mignon
Portion: 4 oz.
Calories: 516
Carbohydrates: 0
Protein: 23
Fat Grams: 46
% of Fat: 80

Food: Lemonade
Portion: 1 cup
Calories: 100
Carbohydrates: 25
Protein: Trace
Fat Grams: Trace
% of Fat: Trace

Food: Onion rings
Portion: 2 oz.
Calories: 168
Carbohydrates: 17
Protein: 2
Fat Grams: 15
% of Fat: 80

Food: Peanut butter
Portion: 1 Tbs.
Calories: 95
Carbohydrates: 3
Protein: 4
Fat Grams: 8
% of Fat: 76

Food: Pepsi
Portion: 12 oz.
Calories: 157
Carbohydrates: 38
Protein: 0
Fat Grams: 0
% of Fat: 0

Food: Raisin Bran
Portion: 1/2 cup
Calories: 102
Carbohydrates: 22
Protein: 3
Fat Grams: Trace
% of Fat: 2

Food: Snickers
Portion: 1 oz.
Calories: 130
Carbohydrates: 15
Protein: Trace
Fat Grams: 8
% of Fat: 55

Project 4

Alphabetic listing by food

Food: Apple (fresh unpeeled)
Portion: 1 med.
Calories: 80
Carbohydrates: 20
Protein: Trace
Fat Grams: Trace
% of Fat: 11

Food: Big Mac hamburger
Portion: 1
Calories: 541
Carbohydrates: 39
Protein: 26
Fat Grams: 31
% of Fat: 52

Food: Filet mignon
Portion: 4 oz.
Calories: 516
Carbohydrates: 0
Protein: 23
Fat Grams: 46
% of Fat: 80

Food: Lemonade
Portion: 1 cup
Calories: 100
Carbohydrates: 25
Protein: Trace
Fat Grams: Trace
% of Fat: Trace

Food: Onion rings
Portion: 2 oz.
Calories: 168
Carbohydrates: 17
Protein: 2
Fat Grams: 15
% of Fat: 80

Food: Peanut butter
Portion: 1 Tbs.
Calories: 95
Carbohydrates: 3
Protein: 4
Fat Grams: 8
% of Fat: 76

Food: Pepsi
Portion: 12 oz.
Calories: 157
Carbohydrates: 38
Protein: 0
Fat Grams: 0
% of Fat: 0

Food: Potato chips
Portion: 3 oz.
Calories: 196
Carbohydrates: 0
Protein: 24
Fat Grams: 11
% of Fat: 51

Food: Raisin Bran
Portion: 1/2 cup
Calories: 102
Carbohydrates: 22
Protein: 3
Fat Grams: Trace
% of Fat: 2

Food: Snickers
Portion: 1 oz.
Calories: 130
Carbohydrates: 15
Protein: Trace
Fat Grams: 8
% of Fat: 55

Numeric listing by fat percentage

Food: Pepsi
Portion: 12 oz.
Calories: 157
Carbohydrates: 38
Protein: 0
Fat Grams: 0
% of Fat: 0

Food: Lemonade
Portion: 1 cup
Calories: 100
Carbohydrates: 25
Protein: Trace
Fat Grams: Trace
% of Fat: Trace

Food: Raisin Bran
Portion: 1/2 cup
Calories: 102
Carbohydrates: 22
Protein: 3
Fat Grams: Trace
% of Fat: 2

Food: Apple (fresh unpeeled)
Portion: 1 med.
Calories: 80
Carbohydrates: 20
Protein: Trace
Fat Grams: Trace
% of Fat: 11

Food: Potato chips
Portion: 3 oz.
Calories: 196
Carbohydrates: 0
Protein: 24
Fat Grams: 11
% of Fat: 51

Food: Big Mac hamburger
Portion: 1
Calories: 541
Carbohydrates: 39
Protein: 26
Fat Grams: 31
% of Fat: 52

Food: Snickers
Portion: 1 oz.
Calories: 130
Carbohydrates: 15
Protein: Trace
Fat Grams: 8
% of Fat: 55

Food: Peanut butter
Portion: 1 Tbs.
Calories: 95
Carbohydrates: 3
Protein: 4
Fat Grams: 8
% of Fat: 76

Food: Onion rings
Portion: 2 oz.
Calories: 168
Carbohydrates: 17
Protein: 2
Fat Grams: 15
% of Fat: 80

Food: Filet mignon
Portion: 4 oz.
Calories: 516
Carbohydrates: 0
Protein: 23
Fat Grams: 46
% of Fat: 80

Project 5

Alphabetic listing by name

Student Name:	Cain, James
Period 1	English 1022
Period 2	Microcomputer App. 8123
Period 3	Typing 0312
Period 4	Biology 3140
Period 5	Geometry 6818
Period 6	World History 4749
Lunch:	A

Student Name:	Gomez, David
Period 1	English 1032
Period 2	American History 4840
Period 3	Spanish 2415
Period 4	Bus. Info. Processing 8124
Period 5	Algebra 6918
Period 6	Business Law 0415
Lunch:	A

Student Name:	Hayes, Randy
Period 1	Algebra 6918
Period 2	Bus. Comp. Programming 8241
Period 3	Am. History 4840
Period 4	English 1032
Period 5	Bus. Law 0415
Period 6	Swim Team 5092
Lunch:	B

Student Name:	Jones, Shannon
Period 1	Bus. Info. Processing 8124
Period 2	Typing 0312
Period 3	Algebra 6918
Period 4	Government 4810
Period 5	Economics 4915
Period 6	English 1042
Lunch:	A

Student Name:	Lane, Michelle
Period 1	English 1011
Period 2	World History 4749
Period 3	Spanish 2405
Period 4	Typing 0311
Period 5	Algebra 6908
Period 6	Physical Science 3020
Lunch:	B

Student Name:	Martin, Tricia
Period 1	Typing 0312
Period 2	Geometry 6818
Period 3	Microcomputer App. 8123
Period 4	World History 4749
Period 5	Biology 3140
Period 6	English 1022
Lunch:	A

Student Name:	Martinez, Steve
Period 1	Creative Writing 1048
Period 2	Drafting 9810
Period 3	Algebra 6918
Period 4	Government 4810
Period 5	Accounting 0121
Period 6	Physics 3240
Lunch:	B

Student Name:	McNutt, Debra
Period 1	Office Adm. Co-Op 8135
Period 2	English 1042
Period 3	Accounting 0121
Period 4	Health 2113
Period 5	Special Assign. 9955
Period 6	Special Assign. 9956
Lunch:	B

Student Name:	Moore, Lakesha	Student Name:	Trang, Chang
Period 1	English 1011	Period 1	Bus. Comp. App. 8534
Period 2	Algebra 6908	Period 2	Algebra 6918
Period 3	World History 4749	Period 3	Government 4810
Period 4	Typing 0311	Period 4	English 1042
Period 5	Microcomputer App. 8123	Period 5	Accounting 0121
Period 6	Physical Science 3020	Period 6	Health 2113
Lunch:	A	Lunch:	A

Alphabetic listing by classification

Classification	Student Name	Student Number
9th Grade	Michelle Lane	#9111544
9th Grade	Lakesha Moore	#9123009
10th Grade	James Cain	#9432109
10th Grade	Tricia Martin	#9489256
11th Grade	David Gomez	#9382716
11th Grade	Randy Hayes	#9544321
12th Grade	Shannon Jones	#9008764
12th Grade	Debra McNutt	#9334289
12th Grade	Steve Martinez	#9015431
12th Grade	Chang Trang	#9155672

Alphabetic listing by name for periods 1, 3, and 5

Student Name: Cain, James
Period 1 English 1022
Period 3 Typing 0312
Period 5 Geometry 6818

Student Name: Gomez, David
Period 1 English 1032
Period 3 Spanish 2415
Period 5 Algebra 6918

Student Name: Hayes, Randy
Period 1 Algebra 6918
Period 3 Am. History 4840
Period 5 Bus. Law 0415

Student Name: Jones, Shannon
Period 1 Bus. Info. Processing 8124
Period 3 Algebra 6918
Period 5 Economics 4915

Student Name: Lane, Michelle
Period 1 English 1011
Period 3 Spanish 2405
Period 5 Algebra 6908

Student Name: Martin, Tricia
Period 1 Typing 0312
Period 3 Microcomputer App. 8123
Period 5 Biology 3140

Student Name: Martinez, Steve
Period 1 Creative Writing 1048
Period 3 Algebra 6918
Period 5 Accounting 0121

Student Name: McNutt, Debra
Period 1 Office Adm. Co-Op 8135
Period 3 Accounting 0121
Period 5 Special Assign. 9955

Student Name: Moore, Lakesha
Period 1 English 1011
Period 3 World History 4749
Period 5 Microcomputer App. 8123

Student Name: Trang, Chang
Period 1 Bus. Comp. App. 8534
Period 3 Government 4810
Period 5 Accounting 0121

List of students in the 12th grade

Shannon Jones
Debra McNutt
Steve Martinez
Chang Trang

Activity 4 Evaluated to the satisfaction of the instructor.

Competency Test Answers

Alphabetic listing by title of book

1-2-3 Beyond The Basics, Spreadsheet, Que
10 Minute Guide to Q & A, Database, Sams
Applying WordPerfect 5.1, Word Processing, Houghton Mifflin
The Best Book of WordStar Second Edition, Word Processing, Sams
Database Productivity: Exercises and Applications, Database, Paradigm
dBASE IV 1.1 QuickStart, Database, Que
dBASE IV: A Practical Learning Guide, Database, Paradigm
Guide to 1-2-3: Release 2.3, Spreadsheet, PC Magazine
Guide to Connectivity, Networks, PC Magazine
Guide to Using NetWare, Networks, PC Magazine
Guide to WordPerfect for Windows, Word Processing, PC Magazine
Learning Lotus 1-2-3, Spreadsheet, Houghton Mifflin
Lotus 1-2-3 Step-by-Step, Spreadsheet, Sams
Mastering Microsoft Word, Word Processing, Sybex
Quattro Pro In Business, Spreadsheet, Sams
The Student Edition of Lotus 1-2-3, Spreadsheet, Addison-Wesley
Using Dataease, Database, Que
Using FoxPro, Database, Que
Using Lotus 1-2-3, Spreadsheet, Houghton Mifflin
Using Paradox 3.5, Database, Que
Using Professional Write Plus for Windows, Word Processing, Que

Database listing

10 Minute Guide to Q & A
Database Productivity: Exercises and Applications
dBASE IV 1.1 QuickStart
dBASE IV: A Practical Learning Guide
Using Dataease
Using FoxPro
Using Paradox 3.5

Spreadsheet listing

1-2-3 Beyond The Basics
Guide to 1-2-3: Release 2.3
Learning Lotus 1-2-3
Lotus 1-2-3 Step-by-Step
Quattro Pro In Business
The Student Edition of Lotus 1-2-3
Using Lotus 1-2-3

Word processing listing

Applying WordPerfect 5.1
The Best Book of WordStar Second Edition
Guide to WordPerfect for Windows
Mastering Microsoft Word
Using Professional Write Plus for Windows

Network listing

Guide to Connectivity
Guide to Using NetWare

Listing by publisher

Addison-Wesley, *The Student Edition of Lotus 1-2-3*
Houghton Mifflin, *Applying WordPerfect 5.1*
Houghton Mifflin, *Learning Lotus 1-2-3*
Houghton Mifflin, *Using Lotus 1-2-3*
Paradigm, *Database Productivity: Exercises and Applications*
Paradigm, *dBASE IV: A Practical Learning Guide*
PC Magazine, *Guide to 1-2-3: Release 2.3*
PC Magazine, *Guide to Connectivity*
PC Magazine, *Guide to Using NetWare*
PC Magazine, *Guide to WordPerfect for Windows*
Que, *1-2-3 Beyond The Basics*
Que, *dBASE IV 1.1 QuickStart*
Que, *Using Dataease*
Que, *Using FoxPro*
Que, *Using Paradox 3.5*
Que, *Using Professional Write Plus for Windows*
Sams, *10 Minute Guide to Q & A*
Sams, *The Best Book of WordStar Second Edition*
Sams, *Lotus 1-2-3 Step-by-Step*
Sams, *Quattro Pro In Business*
Sybex, *Mastering Microsoft Word*

Activities 4-5 Evaluated to the satisfaction of the instructor

Spreadsheets 4-3

Lesson Plan

Essential Element: 75.87 (c)(2)(C)
Allocated Time: 10 Hours

Unit Objective: The student will use related terminology to discuss spreadsheet applications, demonstrate concepts for processing alphanumeric data, apply software capabilities to problem solving, prepare reports, and export data that will be integrated with another software program.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology related to spreadsheets.
2. Discuss spreadsheet applications used in business.
3. Process alphanumeric data.
4. Apply software capabilities to solve problems using a template.
5. Print reports and graphs.
6. Export data from spreadsheet software and import data into a word processing document.

Focus: Spreadsheets are now being used by employees on all levels. Many mathematic functions can be adapted for spreadsheet use. Knowing the basics of spreadsheet procedures increases your possibilities for employment.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or affective domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

4-3 Spreadsheets

Content Outline

Business applications

Accounting applications
Managerial applications

Procedures for processing alphanumeric data

Spreadsheet applications
Creating a worksheet
Default values
Cells
Formats

Using templates

Templates defined
Worksheet retrieval
Cursor/pointer movement
Data entry
Editing cell contents
What-if analysis
Error conditions
Spreadsheet operational procedures

Printing

Reports
Graphic reports

Spreadsheets 4-3

Teacher Activities

Teacher Preparation

☐ Preview the unit.

☐ Review unit objectives.

☐ Make instructional analysis.

☐ Assess student learning needs.

☐ Decide on lesson domain: cognitive, psychomotor, or affective.

☐ Select instructional materials based on instructional analysis and student learning needs.

☐ Select instructional strategies based on lesson content and student learning needs.

☐ Prepare lesson plans from the unit lesson.

☐ Prepare additional instructional material.

☐ Reserve necessary media and equipment.

Teacher Presentation

☐ Present student objectives.

☐ Establish rapport with students.

☐ Review lesson objectives with students.

☐ Relate lesson to prior or future learning.

☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.

☐ Emphasize the value/importance of the unit or activity.

☐ Allow time for closure of a lesson.

Reteach Activities

☐ Identify area(s) of weakness from results of evaluation.

☐ Select unit activities not previously used.

☐ Use additional resources and/or create materials based on student learning needs.

☐ Use a different teaching strategy in reteaching.

☐ Retest.

Specific Teaching Suggestions

- ☐ Become familiar with spreadsheet software.
- ☐ Obtain sample formats of manual worksheets, electronically produced worksheets, graphic representations, and spreadsheet software brochures.
- ☐ Prepare transparencies to illustrate the command categories that are common to spreadsheets.
- ☐ Select workbook assignments or prepare assignments to hand out as worksheets.
- ☐ Develop a list of spreadsheet examples, including some to which students can relate.
- ☐ Make printouts and/or transparencies of sample spreadsheets.
- ☐ Identify reference manual sections that will be useful to the students for this unit.
- ☐ The simulation for this unit is *B & C Enterprises*. You can use this as a culmination activity or test for this unit. It can also be saved for course closure. The simulation stresses spreadsheet activities. Refer to the special products pages located at the front of this book for additional simulations that can be used if this course is the only office education course taught at your school.
- ☐ Remember to use the *Test Builder Program* and the related test bank.

Activity 6

Prepare instructions on how to export data from your spreadsheet software and then how to import the data into your word processing software. Be sure to remind the students that they should use proper memo formats.

Competency Test

The competency test is designed to cover all the competencies. You may want the students to incorporate some of the information they found about spreadsheet applications. Prepare instructions on what you want included in the memo.

ACTIVITY MATRIX

Activities		Domains			Basic Skills		
		Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1		X			X	X	
2	Project 1	X				X	
	Project 2	X				X	
3	Project 1	X	X		X	X	X
	Project 2	X	X		X	X	X
4	Project 1	X	X		X	X	X
	Project 2	X	X		X	X	X
5	Project 1	X	X		X	X	X
	Project 2	X	X		X	X	X
6		X	X		X	X	X

COMPETENCY TEST MATRIX

Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
	X	X		X	X	X

Spreadsheets 4-3

Competency Test

Using the following information, prepare a spreadsheet template and then format the worksheet. After completing the format, enter the data and use formulas to provide answers for the question marks.

Regional sales data for the current year.

	Per. 1	Per. 2	Per. 3	Per. 4	Yr. Totals
Atlanta	2567	2775	3512	2890	?
Boston	4589	3987	4234	4499	?
Chicago	5542	6622	5902	6339	?
Denver	3964	2933	4001	3822	?
New York	7843	8319	7431	7549	?
Rochester	6349	7005	6742	6941	?
San Diego	4589	5176	4723	5202	?
Seattle	1998	2552	2995	2856	?
Totals	?	?	?	?	
Total sales for the current year					?

Your supervisor requests that you print a report and at least two graphs that will illustrate the sales information. You will also need to export the data from the spreadsheet and then import it into a word processing document so that this information can be distributed to the regional managers throughout the country. Use the proper memo format and print a copy for your supervisor.

Activity Answers

Activity 1

```
  W H A T I F A N A L Y S I S
                        T           C
                C O M M A N D L I N E
    G   E D I T         C           L
    L     A         R   K   S   C E L L
  P O I N T I N G M O D E   C   O   P
    B     A         W   D   R   L   O
  B A R     C     B     B   O   U   I
F   L       O     L     A   L   M E N U
U   C U R S O R C O N T R O L   N   T
N   O       R     C         I       E
C O M M A N D     K     L I N E     R
T   M       I               G
I   A     E N T R Y M O D E
O   N       A
N   D       T     L
          C E L L A D D R E S S
            S     B
                D E F A U L T
                  L
```

Activity 2

Projects 1-2 Evaluated to the satisfaction of the instructor.

Activity 3

Project 1 Evaluated to the satisfaction of the instructor.

Project 2 Even though the students do not print the spreadsheet, it should look similar to the following:

	A	B	C	D	E	F
1	Supplies	Beg. Inv.	Used	On-Hand		
2						
3	***Pens***	12	***3***	***9***		
4	Pads	50	***15***	***35***		
5	Paper Clips	15	10	***5***		
6	***Post-Its***	***25***	***10***	***15***		
7	***Pencils***	***30***	***15***	***15***		
8	***Folders***	***5***	***3***	***2***		
9	***Erasers***	***16***	***10***	***6***		

Activity 4

Project 1 Evaluated to the satisfaction of the instructor. The questions should be answered as follows:

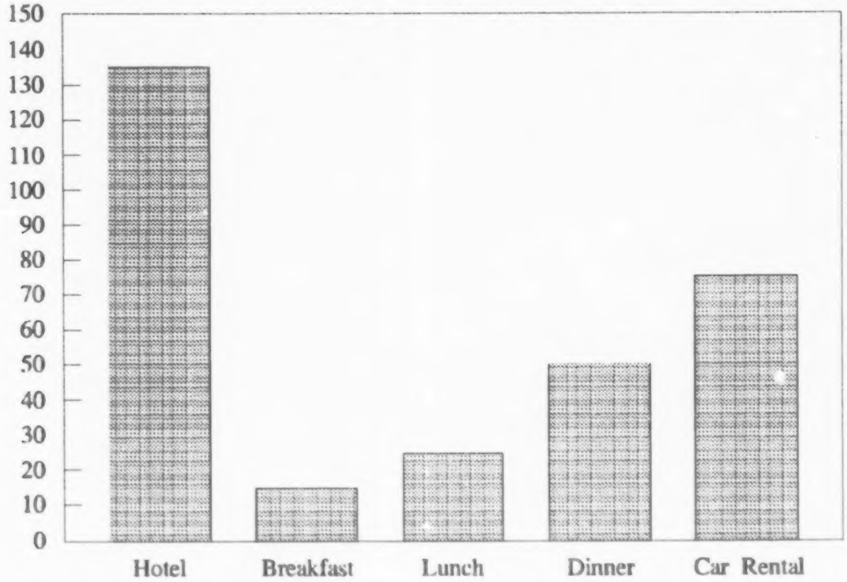
1. Yes
2. $2.00 over budget
3. Place a formula in the total amount column
4. Because she/he has to eat dinner on the night of her/his arrival.

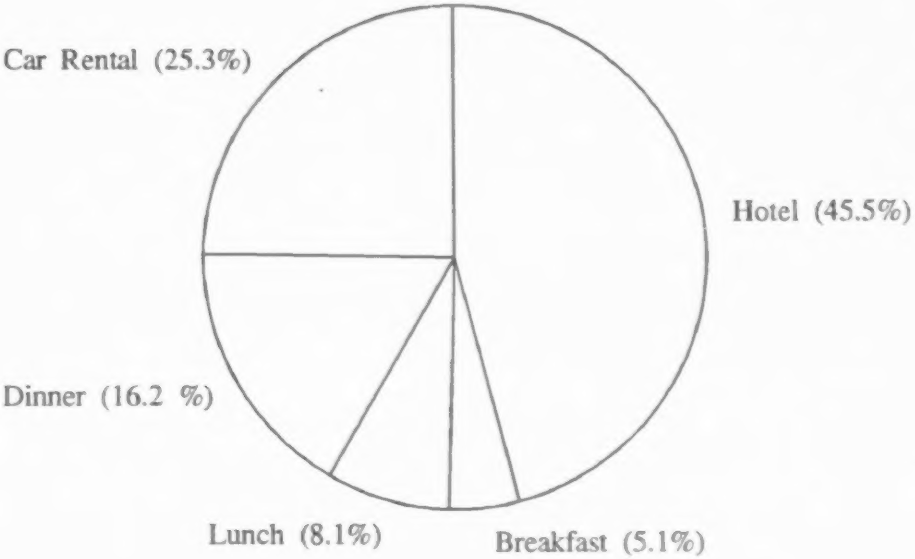
Project 2 Evaluated to the satisfaction of the instructor.

Activity 5

	A	B	C	D	E	F
1	(Student Name) Expense Report					
2						
3	Expenses	Amount ea.	Total Amt.			
4						
5	Hotel	$45.00	$135.00			
6	Breakfast	$ 5.00	$ 15.00			
7	Lunch	$ 8.00	$ 24.00			
8	Dinner	$12.00	$ 48.00			
9	Car Rental	$25.00	$ 75.00			

Project 2





Activity 6 Evaluated to the satisfaction of the instructor.

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Competency Test Answers

The spreadsheet should look similar to the following:

	A	B	C	D	E	F	G
1		Per.1	Per.2	Per. 3	Per. 4	Yr. Totals	
2							
3	Atlanta	$2,567.00	$2,775.00	$3,512.00	$2,890.00	$11,744.00	
4	Boston	$4,589.00	$3,987.00	$4,234.00	$4,499.00	$17,309.00	
5	Chicago	$5,542.00	$6,622.00	$5,902.00	$6,339.00	$24,405.00	
6	Denver	$3,964.00	$2,933.00	$4,001.00	$3,822.00	$14,720.00	
7	New York	$7,843.00	$8,319.00	$7,431.00	$7,549.00	$31,142.00	
8	Rochester	$6,349.00	$7,005.00	$6,742.00	$6,941.00	$27,037.00	
9	San Diego	$4,589.00	$5,176.00	$4,723.00	$5,202.00	$19,690.00	
10	Seattle	$1,998 00	$2,552.00	$2,995.00	$2,856.00	$10,401.00	
11							
12	Totals	$37,441.00	$39,369.00	$39,540.00	$40,098.00		
13							
14	Total sales for the current year					$156,448.00	

Graphs and memo Evaluated to the satisfaction of the instructor.

SECTION 4

Information Management Tools

Unit 1: Records Control

Unit Objective: The students will demonstrate the ability to use ARMA filing rules and maintain control of manual records while using records management terminology.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology used in records management.
2. Demonstrate proper filing procedures.
3. Discuss micrographics and how it is used in records management.
4. Identify steps in transfer of files.
5. Demonstrate the ability to control manual records.

Focus: All businesses have some form of records. Many businesses use manual records management. Being able to maintain manual control of records is an excellent entry-level skill.

4-1 Records Control

Terminology

Active file	File that is currently in use.
Alphabetizing	Putting names in order according to the letters of the alphabet.
ARMA	Association of Records Managers and Administrators, Inc.
Caption	Written, typed, or printed heading on the tabs of guides.
Charge-out	A check-out system used for removing materials from a file.
Chronological order	Filing so that the most current correspondence is on top of the filed stack.
Coding	Marking units in a filing segment.
Correspondence	Written communication between a company and its branches or between a company and other businesses and individuals in the form of letters, memorandums, telegrams, invoices, purchase orders, and other papers sent or received.
Cross-referencing	Preparing a card or form showing the alternate location of a piece of correspondence.
Disposition	The destroying of records no longer needed.
Filing	The systematic arrangement of materials for convenient storage and easy retrieval.
Follow-up	A method of tracing or locating papers not returned to the file on time.
Geographic filing	Filing by a specific regional location.
Identifying elements	Items used to determine correct filing sequence.
Inactive files	Records not subject to frequent use, stored in less accessible places.

Incoming correspondence	All correspondence that originates outside the office.
Indexing	The arrangement of the units of a name for correct alphabetic order.
Individual folders	Contain correspondence to, from, or about an individual or company. Materials are filed alphabetically; current date on top.
Inspecting	Checking for initials or other indications that material is released for storing.
Key unit	The unit under which a name will be filed.
Married woman's legal name	Consists of (1) her first name; (2) her middle or maiden name; and (3) her husband's surname.
Microforms	The media of microfilm storage, such as microfiche and microfilm.
Micrographics	A total microfilm information system, including filming, filing, and retrieval of information.
Miscellaneous folder	Contains correspondence for which there is no individual folder. Material is filed alphabetically, then by date, current date on top.
Numeric filing	Filing by number rather than by alphabetic letter.
Outgoing correspondence	Correspondence that originates within an office.
Periodic transfer	A method of removing papers from the active to the inactive files at stated intervals of time.
Perpetual transfer	A continuous process of removing records from the active to the inactive file.
Primary guides	Guides that are placed before other materials to show the major alphabetic divisions in a file.
Records manual	Business-office publication giving guidelines for maintaining records for that company.

Records management	The system used to make storing (filing) records a reliable and systematic process.
Release mark	The initials of the person who originally received a piece of correspondence.
Retrieval	Locating materials which have been stored in the files.
Sorting	Arranging correspondence according to a predetermined organization.
Store	Placing (or filing of) materials in a file according to alphabetical, chronological, numerical, or subject content order.
Subject filing	Filing correspondence alphabetically by the information contained in the letter.
Unit	Segment of a name used in determining alphabetic order.

Unit Overview

Filing procedures

- ☐ Alphabetic filing
  - ▲ Alphabetic filing is the arrangement of names or other captions in sequential order from A to Z.
  - ▲ It is a direct-access system because the user can access the file without going to an index first.
  - ▲ Clearly defined rules ensure standardization.
    - ARMA is one of the primary sources of filing rules. These rules are:
      - Arrange files unit-by-unit and letter-by-letter within each unit.
      - "Nothing before something"—an alphabetic letter by itself is placed before two of the same alphabetic name.
      - Punctuation is ignored when alphabetizing and hyphenated words are considered one unit.
      - Prepositions, conjunctions, and articles (except at the beginning of a name) are considered filing units.
      - Arabic numerals are filed before Roman numerals; both precede alphabetic characters (both filed from lowest to highest).
      - Always file under the most commonly used name or title.
      - Cross reference names or titles which might cause problems in retrieval.
    - The worker should use the system that has been established at his/her place of employment.
  - ▲ Classification by name is a straight alphabetic filing method.
    - This method includes names of individuals, organizations, businesses, industries, government agencies, geographic locations, etc.
      - A caption is selected to file names correctly.
      - Generally, individual names are filed under the last name.

    - Business names are generally filed by the first main word in the name.
  - Classification by subject or geographic location are two variations of the straight alphabetic method.

☐ Steps in alphabetic filing

▲ **Inspecting**—for a release mark which indicates that a document has been processed and gives the authority to file the document.

- A check mark, initials and a date, a signature, or a file notation are forms of release marks used by companies.
- If there is no release mark, the document should be returned to the person in charge.

▲ **Indexing**—deciding where and in what type of filing system (alphabetic, numeric, subject, geographic, etc.) documents should be stored.

Determine the proper order by one of the following:

- Read or scan each document carefully to determine the key topic or title that best identifies the material.
- A caption or heading identifies information for filing with a name, letter, or number.
- The following items must be examined to determine the proper caption:
  - Letterhead information.
  - Incoming documents—indexed by letterhead or signature of the sender.
  - Outgoing documents—indexed by the inside address, subject discussed, or geographic area.

▲ **Coding**—the procedure for showing how a record should be filed. Preparing cross-references is another part of coding. The following are methods of coding:

- Marking units.
- Underlining the caption.
- Circling the caption.
- Writing the caption in the upper right-hand corner when proper information does not appear on the first page.

- **Cross-referencing**
  - Properly indexed and coded correspondence is filed under the caption by which it is most likely to be requested from the file. When a document may be requested by several names, appropriate cross-references are compiled.
  - Situations which may require cross-referencing are:
    - Names which are foreign or unusual.
    - Names of women who are known by both their married and maiden names.
    - Uncertainty about how a file should be coded.
- **Sorting**—the process of arranging records in the proper order for filing, according to the alphabet or some other desired sequence.
  - Divide the records into smaller groups of information. First, perform a rough sort into divisions such as A-D, E-H, I-M, N-T, U-Z. Then fine sort each stack into the exact order for filing.
  - Commercial sorters are available.
- **Storing** correspondence
  - Types of folders include individual (all correspondence to, from, or about one person/company) and miscellaneous (correspondence from a number of individuals/companies).
  - Sequence of correspondence within folder is alphabetic (by alphabetic letter), or chronological (by date, current date on top).
  - When three or more items from the same company have been accumulated, make a new file.
- **Retrieving** correspondence
  - Charge-out methods
    - Record name of person removing file.
    - Record date file removed.
    - Record proposed date of file return.
  - Follow-up methods
    - Trace files removed.
    - Equipment used to follow-up files includes a card system and follow-up folders.

☐ Misfiling

▲ Causes of misfiling

- Carelessness—failing to scan the contents of a file folder to make sure that the record being added relates to the other documents in file, leaving a paper clip that has picked up unrelated documents, and placing one folder inside another folder.
- Improper use of filing equipment and/or supplies—using either too many or not enough guides, allowing tabs to be hidden or broken off because of overcrowding folders, overstuffing file drawers so that there is inadequate workspace within a drawer, and leaving documents in miscellaneous folders that should have already been filed in specific folders.
- Improper coding includes miscoded documents, transposed numbers, cross-references are not made, carelessness in spelling, hurrying too much, and lack of concentration.

▲ Ways to prevent loss of records

- When filing, stand to the side of the file drawer; this eliminates having to reach too far and accidentally filing the record in the wrong file.
- Make sure that the filing area has proper lighting.
- Raise the folder in which the record is to be stored.
- Do not use paper clips because there is a tendency for records to get caught on them and misfiled.
- After using a folder, return it **immediately** to the file drawer.

▲ Guidelines for locating misfiled records.

- Check to see if record is out of order in file.
- Check "to be filed" tray.
- Check folders directly in front and back of the folder in which record should be found.
- Check space in front of, behind, and under file folder.
- Check names/folders with similar spelling or sound.
- Check other indexing units of record.
- Check under names of related names/subjects.
- Check every possible arrangement of figures in numeric filing.

Micrographics

- Micrographics is the process of reproducing information on some type of microform.
  - Combines science and technology to allow information to be quickly reduced and reproduced on microform media. Records can be conveniently stored and retrieved for reference and use.
  - Microform is a term used for any record, either film or paper, which contains reduced images or microimages. A microimage is the reduction of a larger record.
  - Advantages of microforms
    - Save space.
    - Provide excellent preservation of records.
    - Drastically reduce distribution costs.
    - Time required to retrieve documents is reduced.
    - Efficiency of records personnel is increased.
    - Can be coupled with computers to offer even greater retrieval possibilities.

- Types of microforms
  - **Microfilm**—film that stores many pages of reduced text.

    Characteristics

    - The oldest type of microform.
    - Can be stored on a microfilm roll which contains attached images.
    - Can be produced with a minimum of document preparation.
    - Duplicates easily and is easily obtainable.
    - Can be viewed on a variety of readers.
    - Can be coded to ensure quick retrieval.
    - Strips of microfilm are held in special microfilm jackets.

    Reasons for using microfilm in business

    - The decreasing cost of the microfilm process.
    - Microfilm may be substituted for the original document with federal agencies.

- Better images are produced.
- Indexes of each series of microfilm can be prepared.

Advantages

- A microfilm reader allows information to be located quickly.
- It only takes one operation to locate and print a copy of the document from microfilm on a microfilm reader.
- Less storage space is required for microfilm than for paper.
- Microfilm is cleaner and neater than files.
- It is impossible to misplace an individual record because an entire series of records can be stored on one piece of film.
- Both graphics and alphanumeric data can be stored on microfilm.
- Microfilm is tangible media in comparison to word processing media and computer tapes—it can be read directly.
- Microfilm can be more easily transported than large files.
- Conversion to microfilm is easier than to computerized files.
- Mailing costs for microfilm are less than for paper copies.

▲ **Microfiche**—sheets of film that can store the reduced images of many pages of documents.

Characteristics

- Uses a unit-record approach so that only desired documents are placed on one card.
- Microfilm sheets may contain several miniature documents.
- Economical and can be produced on a variety of equipment.
- Easy to handle and can be mailed cheaply.
- Images can be located quickly on a microfiche reader.
- Can be viewed on a variety of portable or nonportable readers.
- Can be used to film all kinds of documents, including pictures or other visuals in both black and white and color.

Advantages of microfiche over microfilm

- A roll of film is more difficult to use than a sheet of microfiche.
- Additional pages can be added to update microfiche.

Disadvantages of microfilm and microfiche

- Production of paper copies from these media is slow and expensive.
- The integrity of the microfilm would be jeopardized by updating it.
- The purchase of special equipment is required to read documents of either type of media.
- Cannot write on microfilm or microfiche.

- ▲ **Ultrafiche**—the film medium upon which the smallest images of documents are stored.
    - Uses an ultra-high reduction ratio; it is the smallest medium upon which images are stored.
    - Offers the greatest storage density of any microform; it is good for storing documents of more than 1,000 pages.
    - Is more expensive to prepare because it can only be processed in a photographic laboratory.
    - Requires more sophisticated readers capable of enlarging very small images.
- ▲ **Microcard**—also called an opaque card; a special type of microrecord that contains images on both sides of the card.
    - Easily coded and quickly filed and retrieved.
    - Made from durable paper stock coated with a plastic lamination.
    - Can be viewed with inexpensive opaque readers.

Files transfer

- ☐ Types of files
    - ▲ Active files are records used frequently and must be kept accessible for use.
    - ▲ Inactive files are seldom used and should be stored away from the office area.
- ☐ Policy governing how long to maintain records
    - ▲ **Vital** records are necessary to the operation of business. They are irreplaceable if destroyed and should never be transferred.

- ▲ **Important** records facilitate the operation of business. These records can be replaced at great cost if destroyed and can be transferred to inactive files if kept in good condition.
- ▲ **Useful** records are temporarily helpful in the operation of business. They can be replaced at a small cost if destroyed. These records can be destroyed after three or four years.
- ▲ **Nonessential** records are temporarily useful in operation of business. They generally are destroyed after temporary use.

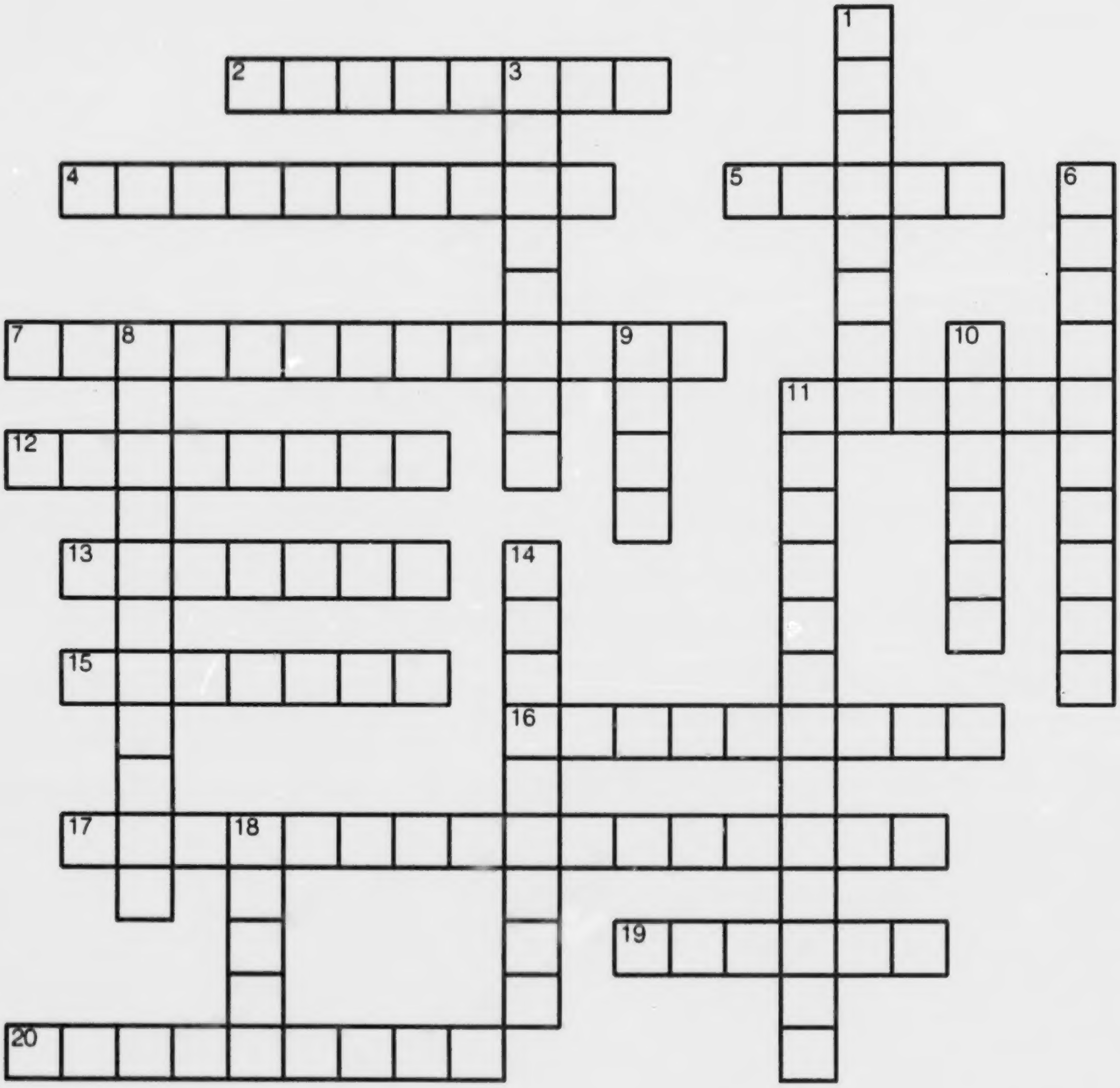
☐ Transfer methods

- ▲ Periodic transfer is the removal of records at stated intervals. Removal of all files to inactive storage is required and new folders are set up. Variations of this method include:
  - One-period plan (transferred at stated intervals).
  - Two-period plan (transferred twice a year).
  - Maximum-minimum period plan (transferred when folder exceeds 75-199 pieces of paper).
- ▲ Perpetual transfer is the continual transfer from active to inactive files. this method is used by businesses which have difficulty setting definite periods for transfer. Normally, contractors, architects, and lawyers use this method.

☐ Steps to transfer files

- ▲ Prepare list of correspondents who will need new folders.
- ▲ Key in labels for new folders.
- ▲ Assemble transfer box for storage of records.
- ▲ Destroy previously transferred records if they are no longer needed. Make sure the authority to destroy the records is in writing.

ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE



ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE CLUES

ACROSS

2. The arrangement of the units of a name for correct alphabetic order.

4. Folders that contain correspondence to, from, or about an individual or company.

5. Segment of a name used in determining alphabetic order.

7. A filing order in which the most current correspondence is on top of the filed stack.

11. A file that is currently in use.

12. A method of tracing or locating papers not returned to the file on time.

13. Written, typed, or printed heading on the tabs of guides.

15. The unit under which a name will be filed.

16. Locating materials which have been stored in the files.

17. Preparing a card or form showing the alternate location of a piece of correspondence.

19. Marking units in a filing segment.

20. A continuous process of transferring records from the active to the inactive file.

DOWN

1. A method of transferring records from the active to the inactive files at stated intervals of time.

3. Records not subject to frequent use, stored in less accessible places.

6. Checking for initials or other indications that material is released for storing.

8. The initials of the person who originally received a piece of correspondence.

9. Association of Records Managers and Administrators, Inc.

10. The systematic arrangement of materials for convenient storage and easy retrieval.

11. Putting names in order according to the letters of the alphabet.

14. A check-out system used for removing materials from a file.

18. Placing (or filing of) materials in a file according to alphabetical, numerical, or subject content order.

ACTIVITY 2: ALPHABETIC FILING

Project 1

Using the following personal names, code each name on the 3" x 5" sheets of paper provided by your instructor.

1. John Henry Brown
2. S. Browning Martinez
3. Brown
4. Mrs. William Marcus Brock (Sandra Bennett)
5. Mrs. J. C. Brockman (Roma Jean)
6. Paul H. Bronman
7. Susan St. James
8. Lynda De la Rosa
9. Charles Adamly
10. Tran Cahn
11. Doris Burk, 1808 Stanley, Austin, TX 78745
12. Paul H. Looney, III
13. Sister Beatrice
14. Jimmy Belton
15. Elizabeth Aston-Sullivan
16. Carol O'Sullivan
17. Doris Burk, 9501 Ramblewood, Austin, TX 78745
18. L. C. Anderson
19. Jefferson Brownley
20. Paul H. Looney, Sr.

Project 2

Place the personal names in *Project 1* in alphabetic order and then write the names below or key in the information using your computer.

1. ________________________________
2. ________________________________
3. ________________________________
4. ________________________________
5. ________________________________
6. ________________________________
7. ________________________________
8. ________________________________
9. ________________________________
10. ________________________________
11. ________________________________
12. ________________________________
13. ________________________________
14. ________________________________
15. ________________________________
16. ________________________________
17. ________________________________
18. ________________________________
19. ________________________________
20. ________________________________

Project 3

Using the following business names, code each name on the 3" x 5" sheets of paper provided by your instructor.

1. Tres Amigos Restaurant
2. Southwestern Airlines
3. Texas Commerce Bank—Northcross
4. ABC Florist
5. First Baptist Church
6. South-Western Publishing Co.
7. Woodmen of the World
8. Texas Commerce Bank—Barton Creek
9. New York Journal—Dallas
10. The In Town Inn
11. 6th Street Cafe
12. Owens-Baker Auto Supply
13. Willie Kocurek Elementary School
14. San Antonio Power and Light
15. New York Journal—New York
16. Utilities Department of Austin
17. Mrs. Johnson's Bakery
18. Motel 6
19. Internal Revenue Service
20. KVET Radio Station

Project 4

Place the business names in *Project 3 in alphabetic order and then write the names below or key in the information using your computer.*

1. ____________________

2. ____________________

3. ____________________

4. ____________________

5. ____________________

6. ____________________

7. ____________________

8. ____________________

9. ____________________

10. ____________________

11. ____________________

12. ____________________

13. ____________________

14. ____________________

15. ____________________

16. ____________________

17. ____________________

18. ____________________

19. ____________________

20. ____________________

ACTIVITY 3: MICROGRAPHICS

Discuss micrographics in a short essay. Include how micrographics are used in business and describe at least two types of microforms.

ACTIVITY 4: FILE TRANSFER

Answer each of the following questions using complete sentences.

1. Discuss the policy governing how long to maintain each of the following types of records.
    1) Vital records
    2) Important records
    3) Useful records
    4) Nonessential records
2. Discuss the two types of transfer methods.

3. List the four steps to transfer files.

   1)

   2)

   3)

   4)

SECTION 4

Information Management Tools

Unit 2: Database

Unit Objective: The students will create, manipulate, and print data using database software. Exporting data will also be demonstrated.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology related to database management.
2. Demonstrate proper procedures to create, enter, store, and retrieve information from a database.
3. Print reports and information from the database.
4. Demonstrate the ability to export information from the database software and import the data into a word processing document.

Focus: Many businesses have converted to computer-based records management. Knowing database procedures gives you an added skill helpful when applying for employment.

Terminology

Arrange/sort	Grouping records in a file, either alphabetically or numerically, according to a preselected field.
Data entry	Entering information into a preprogrammed software package.
Database	A group of related data that is organized and stored so it can be easily changed, calculated, updated, and retrieved in a variety of formats.
Delete	Remove one character, line, or block of data. Generally, a delete function is permanent.
Floppy disk	A small, flexible sheet of plastic, coated with a magnetic material on which a large amount of data or information can be stored magnetically.
Field length	The number of character positions available in a specific field.
Field name/item name	The label assigned to a data item.
Field type	Data classification, assigned according to how the data will be used. Types of classifications are numeric, logical, character/text/alpha, date, or memo.
Field	The smallest unit of storable data. A name, address, phone number, and social security number are all individual fields.
File name	The name assigned to a file.
File	A group of related records.
Form design	Designing a layout for data entry, consisting of the field names.
Function keys	A set of keys which are preset to execute certain complex operations. With a single keystroke, the operator may invoke the function. Function keys are unique according to the software package being used.

Hardcopy	A paper document that is typed, written, or printed.
Hardware	The electronic, electrical, and mechanical devices used in a system; the equipment of a computer system.
Input	Data that are entered for processing.
Insert	The ability to add characters, spaces, or an entire line to a document, field, or record.
Numeric field	A field that contains only numeric data which can be used in calculations.
Output	The final results after input data is processed.
Print screen	Printing an exact copy of the information on the computer monitor.
Record	A collection of related fields. Fields such as the name, social security number, and address related to one person would be considered a record.
Report	Printed and formatted information from a database or other collection of data.
Search/locate/find	To retrieve data from the database based on a specific criterion.
Updating a record	Adding or changing information to a field or fields within a record.
View/Display	Looking at the records stored in a database.

Database 4-2

Unit Overview

Designing/creating a database

Creating a database means to make space on the disk for data. Starting up a new database is usually accomplished through menu commands. The first job is to follow the instructions for creating the input form that has been designed. Output forms can be created at any time. Once the input form is complete, the program is ready for data entry.

☐ Planning the organization of the database

▲ Before creating a database, specific details must be planned and organized so the information ends up in an easy-to-use form.

Steps

- **Define the problem**—prepare a list of desired results. Describe each item. The description should cover all possible details.
- **Describe the flow of information**—draw a simple illustration of the work flow. This drawing can be used as a basis for changing the problem definition into a problem that can be solved by the computer.
- **Define the structure of the data**—identify each file name, data type, and the number of characters to be included in each field. The fields will make up the individual records.
- **Describe the input**—study the data in the source documents. Look at all copies or layouts of source documents before making a final decision of how the form will look.
- **Describe the process**—list the processes that will occur to a file or an input record. After creating the list decide whether or not the records will update files or become output.
- **Describe the output**—develop several possible output formats for the information. Reports and other output can be displayed on-screen or printed.
- **Use test data**—valid data and data with errors should be used to decide whether the system is working properly. If the test data are designed properly, the valid transactions will test a system to its full capabilities and the invalid items will be rejected.

☐ Designing forms

- Input forms should be designed with the goal of making data entry as smooth and easy as possible. The program, the data, the paper size, and the printer all play a part in information management applications, and these components must be coordinated. The following should be considered.
    - **Source documents**—data to be keyed (usually paper documents). If good planning has been done, entering from these source documents will be easy for a data entry clerk. It is most helpful if the screen input form follows the same order as the source document. This minimizes eye movements and searching which speeds data entry, reduces mistakes, and lessens eye strain.
    - **Logical groupings**—it is easier to enter data if related fields follow one another on the form. Smooth movements from one field to the next lead to faster and more accurate data entry.
    - **Spacing**—the screen should be well balanced, not crowded or cluttered. Enough space should be left between fields for good visibility, but should not spread them out unnecessarily. The appearance of the form should be pleasing for the persons who must look at it for long periods.
    - **Prompts**—the words and other characters displayed on the screen should clearly state what data are expected, but should be brief. Use consistent abbreviations and punctuation.
    - **Software capabilities**—the software control options available to the designer. Some packages give complete freedom of screen design, others give very little.
- Capabilities of database include more than merely entering data, storing it, and then printing it out later.
    - **Adding or entering new records** keys data into a file through entries to a format or screen display. Some databases do not permit changing the structure once it has been established and data entered. All databases allow adding more records. Appending data to a file is one of the most frequent activities performed on a database.
    - **Updating or editing an existing record** alters records. The new information replaces the old or can be entered into an empty field. Information also can be removed from a field leaving an empty field.
    - **Deleting records** removes obsolete records. When a record is removed, its space is made available for new data, and its record number reassigned.
    - **Sorting or arranging records** organizes records within a file in a specific order or sequence. Once stored, the data usually remain in the same order. When a printed report is required, the data can be

organized in any order, sequenced, and grouped by one or more fields.

- **Searching or indexing records** creates an index that will locate records within a file. Using special function keys, the database can be searched to locate one or all occurrences of specified data.
- **Querying or inquiring** finds a particular item of information. When the key field is entered, the data relevant to that record will be displayed on the screen.
- **Selecting data** copies all or part of a record in a file into a working file, leaving the existing file undisturbed. The database might contain many thousands of records, but if the user is only interested in special criteria, they can be selected without having to read every record.

☐ Formatting fields

▲ Both field name and data types must be specified during input design. Data can be classified into several types: alphanumeric and several numeric options, such as dollars and cents, percentage, fixed decimal, and date.

Data types

- **Text field**—used to hold the characters A to Z, digits 0 to 9, and special characters such as ., %, -, @, #.
- **Date field**—used to enter formal, calendar dates.
- **Numeric field**—used to hold values, decimals, and calculating numbers.

▲ The structure or characteristics of the data must be defined in terms of:

- The name of the attribute (field or data item).
- The data type (alphabetic, numeric, or logical).
- The length of the data value such as how many characters should be reserved for each attribute. The maximum number of characters needed should be reserved.

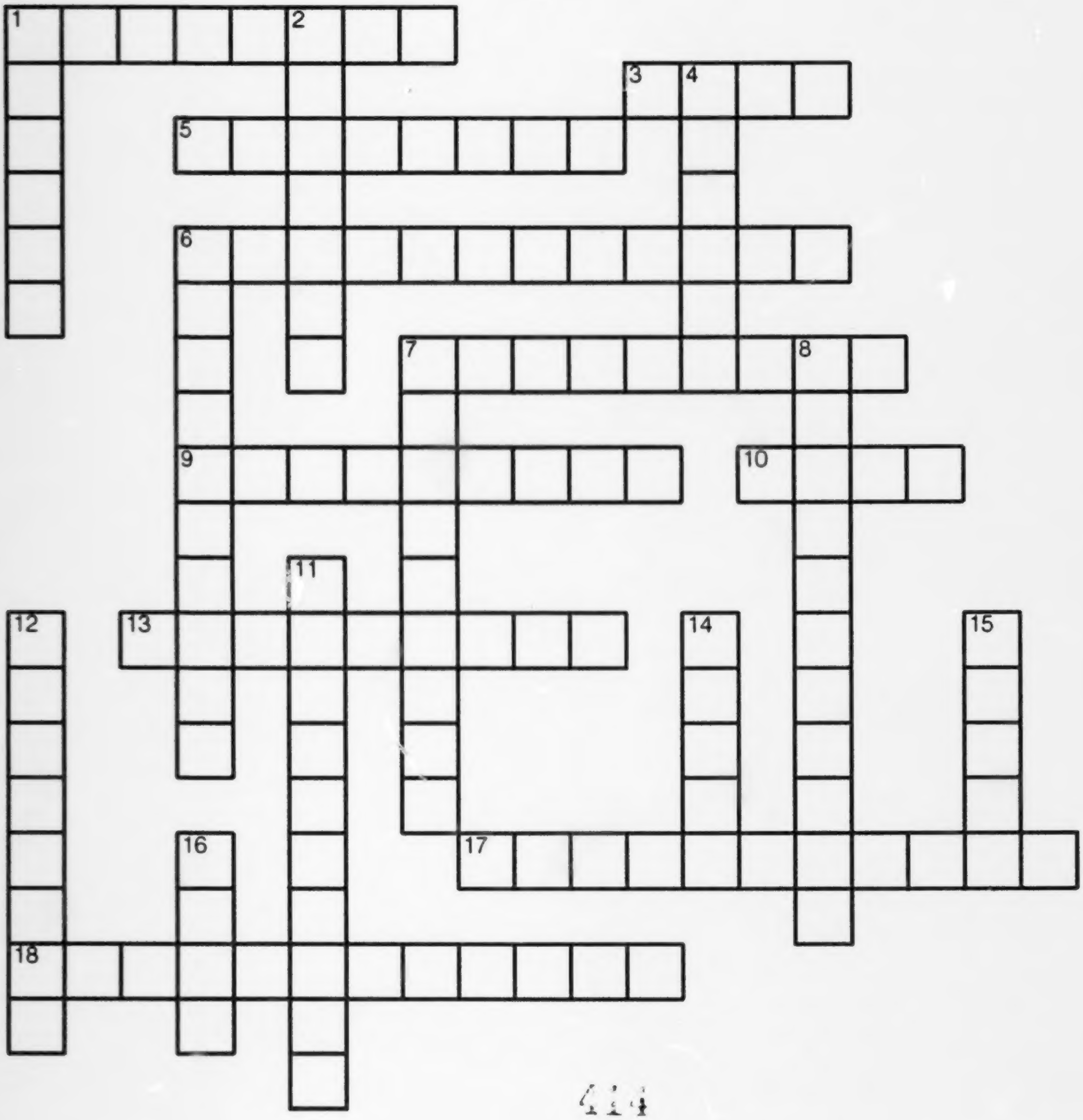
Data entry/output

- Using a database
  - Entering or manipulating data is accomplished one record at a time, using an input form. Some software saves each record on a disk as soon as it is entered. Other programs do not save records until the user terminates the entry session. Any field of a record can be edited while the record remains on the screen.
    - The design of the input form or screen determines what data can be entered into a field. Some fields can be limited to alpha fields, some can be limited to numeric fields, and some can be alphanumeric. Error traps are built in. If the user attempts to key in invalid data, a message will be displayed. This feature does not catch all types of errors. Data will be accepted if the entries are longer than the fields. Most programs display an error message, others will truncate.
    - Once data have been entered, some databases will not allow changing the screen input form. If changes must be made, a new database can be created, and the records copied from the old database to the new.
    - To update files, the editing function changes records that are already a part of a file. The commands to do this vary among software. Obsolete records can be removed from the database by deleting them.
  - Data entry
    - Once the structure has been sent through commands, such as CREATE, STORE, or DEFINE, most software packages will ask for the data to be entered. Enter the data for each record, field by field.
    - Most software provides a form onto which the data are to be entered. This form will appear on the screen and may state the attribute name, data type, and maximum length, as specified in the structure.
    - After a database is set up, the first step is to select the database by name. Then follow the menu to bring up the input form or call for other activities. The program takes care of all recordkeeping and always knows how many records have been entered.
  - Searching for specific records is accomplished through commands such as Find, Seek, or Locate. They may be used for retrieval or query of data.
    - The basic search procedure is to list the criteria that will identify the desired record(s) as part of the command. Three or even more criteria can be listed. A search criterion can be exact or a range. If multiple criteria are required, they are joined with the logical operators AND, OR, or NOT.
    - The search can stop with the first record that meets the criteria or continue searching for all occurrences.

- A relational expression generally is used in a search. A relational expression states the condition on which a record is to be retrieved. Relational operators include: equal to (=), not equal to (≠), greater than (>), less than (<), greater than or equal to (≥), and less than or equal to (≤).

- Output
  - Output forms are used for reports.
    - Several output forms can be designed for the same database. The forms can be stored by name on a disk. If a new report is requested, a new report can be designed.
    - Only the desired fields are included on the form. The data records for the report are selected by searching, unless all records are to be printed.
  - Report forms—most reports are classified as either labels or lists.
    - **Label**—a form that is designed to print data from an individual record. A label can be a single line of print or many lines. Many programs also allow the user to specify several labels to be printed side by side. The arrangement of data on the labels is entirely up to the user. Special forms are commonly used with database reports, particularly with label printing. Single width labels are called "one up," and quadruple width labels "four up."
    - **List**—also called page format, this form consists of headings at the top of the page followed by a print line for each record. Fields are selected and arranged by the user. Many options are available, such as page length and width, printing of page numbers, and line spacing.
  - Producing reports—information is selected, arranged to suit the purpose, and formatted into a report. Commands used for reporting information include REPORT, LIST, and PRINT.
  - Printing produces a hardcopy of the report. Print is normally selected from a menu. Printer options may be selected earlier and saved with the form. Enter the name of the file to be printed, mount the correct forms on the printer, adjust the top of the form, and enter the command to start printing.

ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE



ACTIVITY 1: CROSSWORD PUZZLE CLUES

ACROSS

1. A group of related data that is organized and stored so it can be easily changed, calculated, updated, and retrieved in a variety of formats.
3. To retrieve data from the database based on a specific criterion.
5. A paper document that is typed, written, or printed.
6. A set of keys which are preset to execute certain complex operations.
7. Data classification assigned according to how the data will be used.
9. Entering information into a preprogrammed software package.
10. A group of related records.
13. The label assigned to a data item.
17. The number of character positions available in a specific field.
18. A field that contains only numeric data which can be used in calculations.

DOWN

1. Remove one character, line, or block of data.
2. Grouping records in a file either alphabetically or numerically according to a preselected field.
4. The ability to add characters, spaces, or an entire line to a document, field, or record.
6. Designing a layout for data entry, consisting of the field names.
7. The label assigned to a data item.
8. Printing an exact copy of the information on the computer monitor.
11. A small, flexible sheet of plastic, coated with a magnetic material on which a large amount of data or information can be stored.
12. Adding or changing information to field(s) within a record.
14. The smallest unit of storable data.
15. Data that are entered for processing.
16. Looking at the records stored in a database.

ACTIVITY 2: DATABASE PROCEDURES

Project 1

Use the following data to create a mailing list that will be used for mailing letters to parents. First, design and format the input form, and then enter the data. Save the file under the name *LETTER1*. Use the following fields:

STUDENT NAME
ADDRESS
CITY
STATE
ZIP CODE

Data To Be Entered:

1. George C. Scott, 1112 Easthaven Drive, Pasadena, TX 77504
2. Dorie Copeland, Box 162, Pettus, TX 78102
3. Linda McDonald, 2326 South 39th Street, Dime Box, TX 79605
4. Robert LaMonine, Suite 102, First City National Bank Bldg., Houston, TX 77002
5. Sandra Sue Patterson, 702 Randall Street, Pasadena, TX 77506
6. Kenneth C. Dozier, 1108 Montana Drive, Abilene, TX 79331
7. Lee Johnson, 9501 Martindale Road, Muleshoe, TX 79003
8. Leigh Ann Johnston, 331 Buckskin Pass, Austin, TX 78745
9. Paul C. Davis, Apartment 16, 202 Crockett, Austin, TX 78704
10. Belinda Luther, 10800 Lamar Street, Austin, TX 78757

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Project 2

Design the input form for the following data and then enter data into the database. Save the file under the name *FOOD1*. Use the following fields:

FOOD
PORTION
CALORIES
CARBOHYDRATES
PROTEIN
FAT GRAMS
PERCENTAGE OF FAT

Information To Be Entered:

1. Filet mignon, 4 oz., 516, 0, 23, 46, 80.
2. Apple (fresh unpeeled), 1 med., 80, 20, Trace, Trace, 11.
3. Big Mac hamburger, 1, 541, 39, 26, 31, 52.
4. Pepsi, 12 oz., 157, 38, 0, 0, 0.
5. Snickers, 1 oz., 130, 15, Trace, 8, 55.
6. Raisin Bran, 1/2 cup, 102, 22, 3, Trace, 2.
7. Cornbread, 2 oz., 170, 22, 4, 5, 26.
8. Lemonade, 1 cup, 100, 25, Trace, Trace, Trace.
9. Onion rings, 2 oz., 168, 17, 2, 15, 80.
10. Peanut butter, 1 Tbs., 95, 3, 4, 8, 76.

Project 3

Design and enter the following data into a database file for student schedules. Save the file under the name *STUDENT1.*

Information To Be Entered:

1. David Gomez; 11th Grade; #9382716; 1—English 1032; 2—Am. History 4840; 3—Spanish 2415; 4—Bus. Info. Processing 8124; 5—Algebra 6918; 6—Bus. Law 0415; A lunch

2. Shannon Jones; 12th Grade; #9008764; 1—Bus. Info. Processing 8124; 2—Typing 0312; 3—Algebra 6918; 4—Government 4810; 5—Economics 4915; 6—English 1042; A lunch

3. Michelle Lane; 9th Grade; #9111544; 1—English 1011; 2—World History 4749; 3—Spanish 2405; 4—Typing 0311; 5—Algebra 6908; 6—Physical Science 3020; B lunch

4. James Cain; 10th Grade; #9432109; 1—English 1022; 2—Microcomputer App. 8123; 3—Typing 0312; 4—Biology 3140; 5—Geometry 6818; 6—World History 4749; A lunch

5. Debra McNutt; 12th Grade; #9334289; 1—Office Administration Co-Op 8135; 2—English 1042; 3—Accounting 0121; 4—Health 2113; 5—Special Assignment 9955; 6—Special Assignment 9956; B lunch

6. Steve Martinez; 12th Grade; #9015431; 1—Creative Writing 1048; 2—Drafting 9810; 3—Algebra 6918; 4—Government 4810; 5—Accounting 0121; 6—Physics 3240; B lunch

7. Lakesha Moore; 9th Grade; #9123009; 1—English 1011; 2—Algebra 6908; 3—World History 4749; 4—Typing 0311; 5—Microcomputer App. 8123; 6—Physical Science 3020; A lunch

8. Randy Hayes; 11th Grade; #9544321; 1—Algebra 6918; 2—Bus. Comp. Programming 8241; 3—Am. History 4840; 4—English 1032; Economics 4915; 5—Bus. Law 0415; 6—Swim Team 5092; B lunch

9. Chang Trang; 12th Grade; #9155672; 1—Bus. Comp. App. 8534; 2—Algebra 6918; 3—Government 4810; 4—English 1042; 5—Accounting 0121; 6—Health 2113; A lunch.

10. Tricia Martin; 10th Grade; #9489256; 1—Typing 0312; 2—Geometry 6818; 3—Microcomputer App. 8123; 4—World History 4749; 5—Biology 3140; 6—English 1022; A lunch

ACTIVITY 3: MODIFYING AND PRINTING DATABASE INFORMATION

Project 1

Retrieve *LETTER1* and print a hardcopy alphabetically by last name.

Project 2

Using the file *LETTER1*, add the following records and then reprint the database alphabetically by last name, alphabetically by city, and numerically by ZIP Code.

11. Marie Schmidt-Fox, 513 Blueberry Road, Dallas, TX 72051

12. Leon Morrow, One Silver Fox Drive, Dallas, TX 72033

Project 3

Retrieve *FOOD1* and print a hardcopy alphabetically by food.

Project 4

Using *FOOD1*, perform each of the following activities.

1. Delete the cornbread record.
2. Add Potato Chips, 3 oz., 196, 0, 24, 11, 51.
3. Print an alphabetical listing of food.
4. Print a numeric listing of foods with their fat percentages from lowest to highest.

Project 5

Retrieve *STUDENT1*. Perform each of the following to this file.

1. Print alphabetically by student name. Include ONLY the scheduled classes.
2. Print alphabetically by classification. Include student name and student number in a columnar/tabular report.
3. Print alphabetically by student name. Include ONLY periods 1, 3, and 5.
4. Print a list of students in the 12th grade.

ACTIVITY 4: EXPORTING AND IMPORTING DATA

Using the file *LETTER1*, export the names and addresses and import them into your word processing software. Format the names and addresses to be used as address labels.

SECTION 4

Information Management Tools

Unit 3: Spreadsheets

Unit Objective:

The student will use related terminology to discuss spreadsheet applications, demonstrate concepts for processing alphanumeric data, apply software capabilities to problem solving, prepare reports, and export data that will be integrated with another software program.

Student Competencies:

After completing this unit, the student will be able to:

1. Define terminology related to spreadsheets.
2. Discuss spreadsheet applications used in business.
3. Process alphanumeric data.
4. Apply software capabilities to solve problems using a template.
5. Print reports and graphs.
6. Export data from spreadsheet software and import data into a word processing document.

Focus:

Spreadsheets are now being used by employees on all levels. Many mathematic functions can be adapted for spreadsheet use. Knowing the basics of spreadsheet procedures increases your possibilities for employment.

4-3 Spreadsheets

Terminology

Bar graph	Graphic representation of numeric values as vertical blocks. Each block reflects the value of a single worksheet cell.
Block	A rectangular portion of a spreadsheet (a range).
Cell	The space at the intersection of a row and column.
Cell address	The column letter and the row number intersection.
Cell pointer	Highlighted indicator that designates location of current work area.
Column	A vertical string of cells, annotated by a letter of the alphabet for identification.
Command	The identification of a cell location using the column and row annotation.
Command line	A row on the screen that shows available command choices.
Coordinates	Identify the point at which columns and rows meet.
Cursor control	Using the arrow keys to move the cursor or pointer between cells.
Data	Raw facts, numbers, or characters entered into the computer for processing by software.
Default	An action or value that the software automatically uses if no other is given.
Edit	To make changes to the values within a worksheet.
Electronic spreadsheet	A program that allows electronic calculation of interrelated columns and rows of values.
Entry mode	The status of the worksheet when it is available for entering data.

File	A named unit of data or information, generally the individual worksheet.
Format	A command used to control how numbers are displayed on the screen.
Formula	A mathematical calculation made using constant values and cell addresses in the spreadsheet.
Function	A built-in formula of the spreadsheet software.
Global command	Any command that affects the entire spreadsheet or document.
Graphics	Display of spreadsheet data values as a bar graph, line graph, or pie chart.
Highlight	To emphasize text on the screen by displaying it in inverse video or in a color different from the display's regular color.
Justification	A specified alignment of values of labels within cells.
Label	An alphanumeric tag stored within a cell address that is used to identify a worksheet's contents.
Line graph	A graph on which data are represented by plotting points on a grid and joining them.
Macro	A command that allows one or two keystrokes to replace a frequently used sequence of keystrokes.
Menu	A list of options or commands from which the user may select.
Mode	The operating state in which a program runs that is selected from a set of exclusive operating options.
Paging	Scrolling through the worksheet, one full screen at a time.
Pie chart	A chart that illustrates relationships of parts to a whole.
Pointer/cursor	Highlighted cell indicating where the next keyed entry will be placed in the worksheet.
Pointing mode	Commands or formulas are completed by going to cells with the cursor, instead of keying in all the cell addresses.

Range	A rectangular group of cells that can be manipulated as a group with a command or formula.
Row	A horizontal string of cells across a worksheet, annotated by a number for identification.
Save	To store information in a file.
Scrolling	Using the cursor control keys to move the display screen in four directions.
Stacked-bar graph	A graph that has values stacked above one another as opposed to side-by-side.
Value	A figure stored within a cell address that can be used in mathematical calculations.
What-if analysis	A primary function of spreadsheet software that allows the user to change values within the worksheet, asking this question.
Window	A portion of the worksheet which can be viewed on the display screen at one time.
Worksheet	The grid of columns and rows within the spreadsheet software.

Business applications

- ☐ Accounting applications include:
  - ▲ Budgets
    - The current year's actual figures are listed in one column.
    - The next year's budget figures will be listed in the next column.
    - The difference between these two columns will be calculated by the spreadsheet software in the third column.
  - ▲ Payroll
    - Through the use of a simple worksheet, the software can perform the computations based upon formulas previously entered.
    - Deductions, such as payroll taxes, social security, and insurance can also be entered as formulas within the worksheet.
  - ▲ Checking accounts
    - A worksheet can be set up to compute the balance of the account based upon the entry of check or deposit amounts.
    - By entering this data into the computer, it is simple to keep the balance current.
    - In this way, it is easy to produce a document for use in reconciling the checking account with the bank statement.
  - ▲ Income tax preparation
    - Because tax forms change from year to year, software overlays called "templates" are an inexpensive way to have current software.
    - A template is a prepared set of formulas that will work with an existing spreadsheet software package.
    - These worksheets, with their formulas, contain income information. With the spreadsheet software, the templates will provide the user with the amount of tax owed or the amount of the refund.

- ▲ Inventory tracking
  - Software tracks how many of an item are on-hand (in the store, warehouse, etc.).
  - How much the item costs.
  - How many items should be reordered.
  - The date the item was last sold.

☐ Managerial applications include:

- ▲ Projecting and analyzing sales
  - Managers ensure that sales of their various products or services occur at a rate that will allow the business to make money. An electronic spreadsheet can pinpoint what sells and what doesn't sell.
  - Using a spreadsheet software package, a sales manager can track individual salespersons and their sales amounts for each of the twelve months of the year.
- ▲ "What-if" analysis
  - A manager can make decisions using projected "scenarios."

Example: A manager wishes to purchase a new copy machine.

Office Expenses (Copying)

No. of copies	Cost	Total/month
1500	.10	$150.00
Employee pay rate	Time	Total/month
$7.50/hour	20 hours	$150.00
	Total	$300.00

Copying Machine Expenses

Monthly payment	Supplies/Mo.	Total/month
$100.00	$30.00	$130.00
Employee pay rate	Time	Total/month
$7.50/hour	6 hrs.	$ 45.00
	Total	$175.00

If an employee needs 20 minutes driving time to and from the copy shop, and it takes approximately 20 minutes to make the needed 75 copies (1500 copies a month is approximately 75 copies per day), then 20 hours per month of the employee's time is used making copies. With the new copy machine, the same 20 minutes per day will be needed to make the copies. However, without the travel time, the cost is cut to 6 hours per month.

By using the spreadsheet to perform these calculations, the manager can easily see that it will be cheaper to have an in-house copy machine. The manager could also change the figures of the cost of the copy machine, perhaps to those of a more deluxe and expensive model, to see what the "break-even" point would be. In short "what if we do this, versus what if we do that."

- ▲ Calculating commissions
    - A commission is a percentage of the total amount of sales.
    - A worksheet within an electronic spreadsheet provides an accurate means for the computations.
    - A worksheet also gives the manager up-to-date commission figures at the touch of a button.

Procedures for processing alphanumeric data

- ☐ Problem-solving steps in worksheet design
    - ▲ **Understand the problem**—fully understand what is to be accomplished. This is very important in terms of formulas. A subtotal, for example, is not the same thing as a grand total.
    - ▲ **Design a solution**—before approaching the computer, have in mind what the worksheet will look like; for instance, decide whether to include labels, whether the identifying labels will be vertical or horizontal, and choose the format for the various values.
    - ▲ **Enter the worksheet**—using the spreadsheet software, enter the worksheet according to the design.
    - ▲ **Test and edit**—manually check a few of the calculations to ensure that cells are referenced properly. If there are errors, make corrections.

☐ **Cells**—the cell is the point of intersection of a row and column. All data entered into a worksheet are stored in cells and referred to by cell addresses.

- ▲ **Cell addresses**—because the cell is the intersection of a row (which is usually numbered) and a column (which is usually labeled with a letter of the alphabet), the address of a cell is the column letter and the row number.
  - For example, if the number 1234 is stored at the intersection of column B and row 4, the cell address is B4.
  - This is significant when using formulas because within a formula, reference is to a specific cell address instead of a constant number.
- ▲ **Contents**—the value, label, formula, or function that is stored in a given cell. The cell contents may change.

☐ **Formats**—the way the cell contents are displayed, or how the contents look on the screen or when they are printed.

- ▲ **Labels**—characters, special symbols, or numbers that will not be used in calculations.
  - Labels are generally used to make the worksheet easier to read or understand.
  - The only formatting done on a label is its justification. Labels may be right-, left-, or center-justified.
- ▲ **Values**—numbers used in mathematical calculations.
  - Values are right-justified within the cell. The default format for values is usually listed "as-entered," "appropriate, "or "general, "meaning that the number will not automatically supply trailing zeroes to the right of the decimal place, commas, dollar or percent signs.
  - Only numbers and decimal points may be entered as a value.
  - Special commands, such as "Layout" or "Value Format" must be given to the spreadsheet so that numbers will be displayed with special characters, decimal places, and commas.
  - There are also special formats for displaying negative numbers. These vary among spreadsheets.

- Default values—those settings the software package will use if the user does not specify other values.
    - Changing default settings
        - Most spreadsheet software packages allow the user to change or override the default settings of a worksheet.
- For example, it may be more convenient to have the default value format set for currency or dollars (to display dollar signs and two places to the right of the decimal point) than to display plain numbers and continually change the formats.
- Creating a worksheet
    - Spreadsheet software can be "self-booting," which means that the disk containing the software is placed into the disk drive, and the software automatically initiates the instructions for beginning the program. The other type of software allows the user to type a command to initiate the program.
    - **Naming**—all worksheets are stored on the disk and in the computer's primary storage in the form of files.
        - Each file must have a unique filename.
        - The number of allowable characters will vary depending on the software package.
        - Some software packages require the user to name the file before beginning, others allow the file to be named after the worksheet is entered.
    - **Saving**—all worksheets must be saved to the hard disk or to a floppy disk.
        - While working on a worksheet, it is temporarily stored in the computer's primary memory. Once the computer is turned off, however, the worksheet will no longer be stored.
        - It is necessary, therefore, to save (copy) the worksheet from primary memory to the hard or floppy disk.
        - Once saved, the worksheet will be in the computer's primary memory (until another file is retrieved or the computer is turned off) and a copy will also be on secondary storage, the disk.
        - In some packages, the naming and saving function will take place after the worksheet is entered.
    - **Printing**—it is possible to print all or part of a worksheet with the computer's printer. The software allows the user to specify which columns or rows to print, leaving the entire spreadsheet intact. Some packages allow printing sideways and compressed print.

Using templates

- ☐ Templates are worksheets that have been set up with labels and formulas.

- ☐ **Worksheet retrieval**—copying the prepared worksheet from a disk to the computer's memory.
  - ▲ The worksheet must be in the computer's primary memory before any processing can be accomplished through the spreadsheet software.
  - ▲ The worksheet is generally referred to as a file.
  - ▲ The way in which a worksheet or file is retrieved varies among the different spreadsheet packages.

- ☐ **Cursor/pointer movement**—the cursor or pointer is the highlighted block on a worksheet that shows where the data will be displayed and stored.

- ☐ **Data entry**—keying data into the worksheet.
  - ▲ Based upon the format, the formulas, or cell width, the data alternately will be displayed and formatted.
  - ▲ Key the required words or numbers and press either the enter, return, or arrow keys.
  - ▲ The arrow keys will enter the data into the cell (the one highlighted with the pointer or cursor) and also will move to the next cell in the direction of the arrow key pressed.

- ☐ **Editing cell contents**—in many of the early spreadsheet software packages, the only way to edit or change the contents of a cell was to retype the entry.
  - ▲ Today's electronic spreadsheet software packages allow editing one cell at a time.
  - ▲ Placing the spreadsheet into "edit mode" will vary depending upon the software used. Available capabilities include changing values, changing cell contents, updating values, updating cell contents, and data editing.

- ☐ "What-if" analysis
  - ▲ Allows the user to change various values within the worksheet.

  - ▲ The spreadsheet software automatically recalculates the worksheet based upon the new values.
    - Allows managers to project and analyze the effects that various financial activities will have on their business.
    - Shows the changes that a new value causes within the entire worksheet.

- ☐ Error conditions
  - ▲ **Cell width**—as a result of a calculation, the width of the cell may not be sufficient to accommodate the length of the value.
    - For example, if a column of three digit numbers with two places to the right of the decimal point is the total amount, then it would require a cell width of six (e.g. 543.00).
    - If a cell is formatted for six positions and addition results in a number that requires nine positions, the cell will not hold this value.
    - When the cell width is insufficient, an error condition will be displayed. Many times, the cell will simply be displayed as ######, indicating that the cell isn't wide enough. The sum is still stored, but can't be displayed. If this occurs, change the column width.
  - ▲ **Values/Label**—two problems can occur when using values or labels.
    - A special character can be used as a label. Before using a special symbol as a label, the computer must be instructed to do so.
    - This is usually done by beginning the entry with the label indicator character. In Appleworks and Lotus 123, the left-justified label indicator is the quote mark.
    - When numbers are entered as labels, the numbers will be entered into the worksheet, but cannot be used in calculations because the computer thinks they are labels.
  - ▲ **Formula transposition**—it is extremely important that formulas refer to the proper cell addresses. By making a few "spot check" manual calculations, formula errors can easily be found.

- ☐ Spreadsheet operational procedures
  - ▲ **Formulas**—by entering values into various cells and entering a formula that references those cells, we get an immediate recalculation of the formula if the source cell's values are changed.
    - The cell address is used in the formula as a variable value.

  - A variable is a storage location (cell) whose value may change.
  - Formulas may also contain constants (numbers within a formula whose values don't change).

- **Functions**—formulas that have been built into the spreadsheet to save time and increase accuracy.
  - When adding a column of 12 numbers, the formula could look something like this:

    +A1+A2+A3+A4+A5+A6+A7+A8+A9+A10+A11+A12

    - One common function found in most spreadsheets is the @SUM function which tells the spreadsheet that a function will follow.
    - For example, the @SUM function to add the 12 numbers would be:

      @SUM(A1...A12)—the function means that the values between A1 and A12 inclusive will be added together.
  - There are many built-in functions in most spreadsheets. Their type and complexity will vary among different software packages.

- Recalculation
  - Recalculation of worksheets is an automatic function of most spreadsheets. The spreadsheet will automatically recalculate the worksheet every time a change is made.
  - While editing a large worksheet, the recalculation setting generally should be changed to manual. When editing is completed, there will be a specified set of keystrokes to command the spreadsheet to recalculate the worksheet.

- Column width
  - Generally, the default setting for the column width is not wide enough for labels or very long numbers.
  - Check the software manual under "column width" for instructions to change the width.

- Editing
  - Most spreadsheet software packages will allow the user to edit or change the contents of the cells without rekeying the entire cell.
  - The keystrokes will vary greatly from package to package.

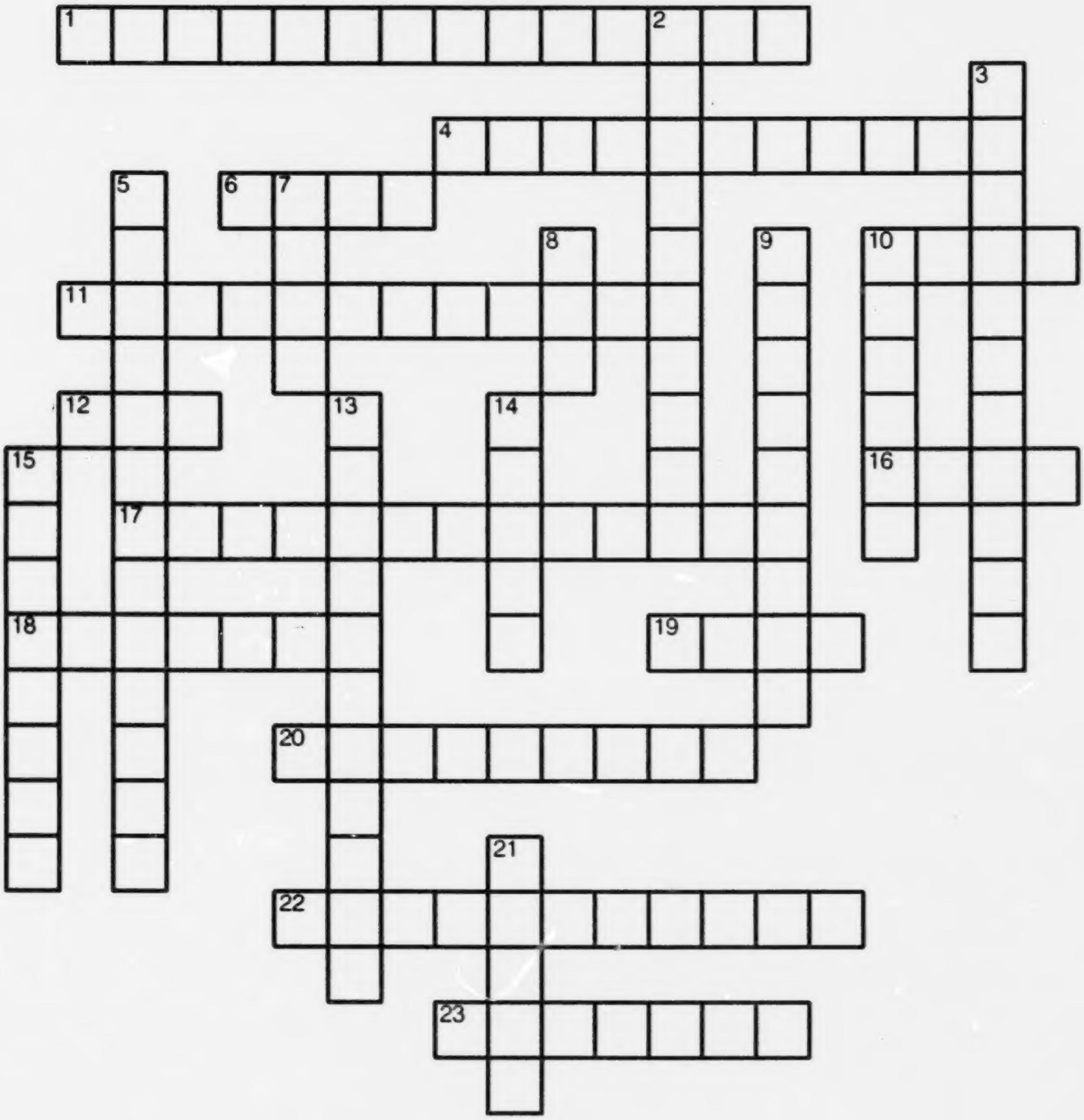
Printing

- Reports—printing is used to make a hardcopy of all or part of the spreadsheet.
  - Print format controls
    - **Range print—**printing a selected area or all of the spreadsheet.
    - **Headers/Footers—**may include label, page number, date, and time.
    - **Borders—**show column letters and row numbers.
    - **Printer codes—**setups to change printer codes.
    - **Margins—**set the border of the left and right side of the paper.
    - **Page breaks—**number of lines per page.
    - **Printing cell contents—**prints only formulas and functions instead of the resulting values.

- Graphic reports—some spreadsheet programs are integrated with a program that produces graphs. Those spreadsheet programs without graphic capabilities usually can be used with a stand-alone graphic program.
  - Types of graphs
    - **Bar graph—**is most appropriate when displaying comparative values and when the number of values being compared is less than 15 or 20. Typically, a date or a category is listed along the bottom line and bars rise from the axis to a height represented by a scale along the left-hand edge.
    - **Stacked bar graph—**is a variation on which two or three values are displayed on each bar by using a different color or gray shade. An example of a stacked bar would be one where sales figures were shown for each month, but with comparative figures for each of two years shown on each bar.
    - **Line graph—**a point is plotted for each date or category and the points are joined, making a line (usually not straight). Line graphs are preferred when there are numerous categories. They are not very effective when there are only four or five categories.
    - **X-Y graph—**the x-y graph is sometimes called a scattergram because many points can be plotted. Each point to be plotted would have both x and y values. Graphs of this type can be used to show relationships. An example would be to relate grade point averages with SAT scores for a large number of students. To show a meaningful pattern, and x-y graph needs many points plotted.

- **Pie chart**—data which can be expressed as a percentage can be graphed with a pie chart. A circle is displayed, divided into segments according to the percentage represented. Each segment is a different color or gray shade. Pie charts work well when there are two to eight categories. With many more, it becomes hard to distinguish among them.

ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE



ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE CLUES

ACROSS

1. A primary function of spreadsheet software that allows the user to change values within the worksheet.

4. A row on the screen that shows available command choices.

6. To make changes to the values within a worksheet.

10. The space at the intersection of a row and column.

11. Commands or formulas are completed by going to cells with the cursor, instead of keying in all the cell addresses.

12. The graph represents numeric values as vertical blocks.

16. A list of options or commands from which the user may select.

17. Using the arrow keys to move the cursor or pointer between cells.

18. The identification of a cell location using the column and row annotation.

19. A graph on which data are represented by plotting points on a grid and joining them.

20. The status of the worksheet when it is available for entering data.

22. Because the cell is the intersection of a row and a column, it is the column letter and the row number.

23. An action or value that the software automatically uses if no other is given.

DOWN

2. A graph that has values stacked above one another as opposed to side-by-side.

3. Highlighted indicator that designates location of current work area.

5. Any command that affects the entire spreadsheet or document.

7. Raw facts, numbers, or characters entered into the computer for processing by software.

8. A horizontal string of cells across a worksheet, annotated by a number for identification.

9. Using the cursor control keys to move the display screen in four directions.

10. A vertical string of cells, annotated by a letter of the alphabet for identification.

13. Identifies the point at which columns and rows meet.

14. A rectangular portion of a spreadsheet (a range).

15. A built-in formula of the spreadsheet software.

21. An alphanumeric tag stored within a cell address that is used to identify a worksheet's contents.

ACTIVITY 2: SPREADSHEET APPLICATIONS

Project 1

With a partner, go to several local businesses to see how they are using spreadsheets and then write a short paragraph about the information you found.

Project 2

Survey your home and make a list of the data that could be listed in a spreadsheet.

ACTIVITY 3: CONCEPTS FOR PROCESSING DATA

Project 1

Enter the following data into the cell addresses shown. Key in the labels and the values exactly as they are given below. Save the file under EXER01.

	A	B	C	D	E	F
1	Supplies	Beg. Inv.	Used	On-Hand		
2						
3	Pencils	12	6			
4	Pads	50	20			
5	Paper Clips	15	10			
6						
7						
8						

Project 2

Retrieve the worksheet EXER01. Make the changes indicated in bold italics to the cells.

	A	B	C	D	E	F
1	Supplies	Beg. Inv.	Used	On-Hand		
2						
3	***Pens***	12	***3***	+B3-C3		
4	Pads	50	***15***	***+B4-C4***		
5	Paper Clips	15	10	***+B5-C5***		
6	***Post-Its***	***25***	10	***+B6-C6***		
7	***Pencils***	30	***15***	***+B7-C7***		
8	***Folders***	5	***3***	***+B8-C8***		
9	***Erasers***	16	***10***	+B9-C9		

Save the changed worksheet with filename EXER01A.

440

ACTIVITY 4: SOLVING PROBLEMS WITH TEMPLATES

Project 1

You are a purchasing agent for a local teen clothing store. You have been given the exciting assignment of selecting and buying two new lines of clothing for the store. To do this, you will be going to the Apparel Mart in Dallas and you're to have an expense account! Your salary is low, however, so it is extremely important that you remain within your budgeted expense allowance of $210 for two days. Your airline ticket is not included in this amount because you've been given a round-trip ticket. To ensure you can live within your budget, you prepare the following spreadsheet:

Expenses	Amount each	Total Amount
Hotel	$ 45.00	$ 90.00
Breakfast	$ 5.00	$ 10.00
Lunch	$ 8.00	$ 16.00
Dinner	$ 12.00	$ 36.00
Car Rental	$ 25.00	$ 50.00
	Grand Total	$202.00

Do Not enter the dollar signs. Save the file as EXPEND1.

Answer the following questions after preparing the spreadsheet.

1. Will you be able to make the trip within the prescribed budget?

   ____.

2. "What if" the hotel bill is $50.00 per night instead of $45.00?

   ____.

3. How would you "build" the spreadsheet so that you could change the hotel bill amount and immediately see that result?

   ____.

4. Why do you have three dinners listed?

   ____.

Project 2

Retrieve the template you created in *Project 1*. Change the column width to 15. Numeric format should be currency (dollars) with two places to the right of the decimal. The company has also notified you that another day will be required since the purchasing is going so well. They will pay another $110 for the extra day. Make the changes in the formulas. Save the file as EXPEND2.

ACTIVITY 5: PRINTING REPORTS AND GRAPHS

Project 1

Retrieve EXPEND2 and perform each of the following.

1. Insert two rows at the top of the worksheet.
2. In *Row 1*, use the title (your name) Expense Report
3. Save the worksheet.
4. Print the expense report.

Project 2

Using the file EXPEND2, create a pie chart and a bar graph. Be sure to use titles.

4-3 Spreadsheets

Activities

ACTIVITY 6: EXPORTING AND IMPORTING DATA

Export the data in the file EXPEND2 and import the information into a word processing document. The information will be included in a memo to your boss. The memo is as follows:

TO: (your instructor's name)

FROM: (your name)

DATE: (current)

SUBJECT: *EXPENSE REPORT FROM DALLAS PURCHASING TRIP*

During my recent trip to Dallas, I incurred the following expenses.

(Spreadsheet information)

As you can see from the information above, I was able to stay within the constraints of my budget. Thank you for allowing me to stay an extra day because that day appears to be the most successful of the trip. If you need any additional information, please feel free to contact me.

SECTION 5
Information Processing Tools

Essential Elements 75.87 (c)(3)

(3) Concepts and skills related to management of information flow out of, into, and within an office. The student shall be provided opportunities to:

A. demonstrate computer-aided preparation and distribution of personalized correspondence using electronic mail;

B. identify tools for preparing information for mass distribution and then demonstrate desktop publishing and presentation graphic techniques;

C. apply the concepts of using communication systems both for accessing remotely stored information (at least including use of on-line information services) and for transmission of outgoing information, and utilization of electronic bulletin boards; and

D. demonstrate transportation of electronic images.

Telecommunications 5-1

Lesson Plan

Essential Elements: 75.87 (c)(3)(A)(C)(D)
Allocated Time: 10 Hours

Unit Objective: Students will gain an understanding of the concepts of exchanging data through telecommunications, including electronic mail, bulletin boards, on-line information services, and facsimile transmissions. They will also discuss network configurations and components.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology related to telecommunications and networks.
2. Identify equipment needed for telecommunications.
3. Discuss and apply procedures for communicating with electronic bulletin boards, on-line information services, electronic mail, voice mail, and facsimile transmissions.
4. Discuss equipment requirements for network configurations.

Focus: Telecommunications and networks are growing in importance within the business world. Information can be received, sent, and shared in a few moments rather than a few days. Having timely information increases accuracy and productivity; therefore, all personnel need to know the basics of telecommunications and networking.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or affective domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

5-1 Telecommunications

Content Outline

Telecommunication equipment

- System requirements
- Data communication procedures

Communication services

- Electronic bulletin board systems (BBS)
- On-line information services
- Electronic mail concepts (E-mail)
- Voice messaging or voice mail
- Facsimile (FAX)

Network concepts

- Network configurations
- Common components
- Purpose of networking
- Network set up and installation
- Network advantages
- Network disadvantages

Telecommunications 5-1

Teacher Activities

Teacher Preparation

- ☐ Preview the unit.
- ☐ Review unit objectives.
- ☐ Make instructional analysis.
- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or affective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Suggestions

- ☐ Prepare bulletin boards with pictures of various types of modems, networks, and brochures about teleprocessing hardware and software.
- ☐ Arrange for a dedicated phone line, modem, and communication software to be available for classroom use or provide simulators.
- ☐ Demonstrate procedures for using a modem.
- ☐ Invite a local cable and/or telephone company representative to discuss his/her part in telecommunications. Ask the speaker to discuss telecommunications in general to the class and how it affects their community.
- ☐ Obtain a membership in a local BBS or TENET for classroom use.
- ☐ Determine the steps to access various on-line information services available in your area.
- ☐ Secure a FAX to be used in your classroom for a week. Lease, borrow, or have a vendor bring one and demonstrate it.
- ☐ Make arrangements to use the school's or the district's FAX machine. Explain you will have one group of student in your classroom using the FAX and another group at the other FAX.
- ☐ Invite a speaker to discuss capabilities and advantages of distributed data processing.
- ☐ Obtain literature about network hardware and software available for use with micro-computers.
- ☐ Arrange a field trip to a location where a mainframe is used to operate a multi-user system with microcomputers as workstations.
- ☐ Invite a representative from a vendor that installs local area networks to speak about the requirements and procedures of installation.

☐ The simulation for this unit is *Agricultural Technologies, Inc.* You can use this as a culmination activity or test for the unit or save it for the course closure. The simulation stresses telecommunication activities. Refer to the special products pages located at the front of this book for additional simulations that can be used if this course is the only office education taught at your school.

☐ Remember to use the *Test Builder Program* and the related test bank.

Activity 3

Projects 1-2	Prepare instruction sheets for the students. Have them retrieve information that is pertinent to this unit such as information about telecommunications, networks, equipment, etc.
Project 5	After the students have completed their cover sheets, give them a letter or memo that they have completed in another unit or another document that has been prepared by advanced or previous students.

Competency Test

The competency test is designed to cover all the competencies in this unit. You are the supervisor referred to in the test. Provide the students any additional information you want them to receive from the bulletin board or on-line service. You can use a simulation to send the memo. The three persons can be three students in the classroom. You will also need to provide the students with the name and FAX number of the person to receive their FAX transmissions.

ACTIVITY MATRIX

Activities	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1	X			X	X	
2	X				X	
3 Project 1	X	X	X	X		
Project 2	X	X		X		
Project 3	X	X	X	X	X	
Project 4	X				X	
Project 5	X	X	X		X	
4 Project 1	X	X			X	
Project 2	X				X	
Project 3	X				X	

COMPETENCY TEST MATRIX

Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
	X	X	X	X	X	

Telecommunications 5-1

Competency Test

You have been hired by *TeleCom*, a telecommunications center. You will be in charge of all incoming and outgoing communications. Your supervisor has asked that you perform the following activities. When you have completed each of the activities, give your supervisor all the information.

Prepare a memo that describes telecommunication equipment.

Prepare a brief document that describes common networks, equipment needed, and any special information regarding installation.

Prepare a memo describing voice mail and its special features.

Design a cover sheet for a FAX sent from your company.

Go on-line with a bulletin board and an information service to locate any information concerning recent technological advancements in telecommunications.

Send the memo about telecommunication equipment electronically to at least three people in your company, including your supervisor.

FAX the document about networks and the voice mail memo to the person your supervisor specifies.

Activity Answers

Activity 1

```
A C O U S T I C C O U P L E R
  O
  M       H A N D S H A K I N G   S
  M   B         I                 W
  O   A         G     T O K E N R I N G
  N   U   H   R I N G             T
  C   D   O     T           B     C
  A   R   S     A       D   U     H
  R   A   T     L E A S E D L I N E S
  R   T   C     S       M   L     D
F I B E R O P T I C S   O   E     L A N
  E       M     G       D   T     I   E
  R   D   P     N   M   U   I     N   T
      O   U     A   O N L I N E   E   W
      W   T     L   D   A   B         O
C H A N N E L       E   T   O   S T A R
      L   R         M   I   A         K
      O                 O   R         I
  E M A I L             N   D         N
      D                               G
```

Activity 2 Evaluated to the satisfaction of the instructor. The students should include in their explanations modems, computers, and channels.

Activity 3

Projects 1-3 Evaluated to the satisfaction of the instructor.

Project 4 Evaluated to the satisfaction of the instructor. The students should include in their paragraphs the definition of voice mail and then include at least three of the following:

- **Edit**—the user can edit sections of a message.
- **Save**—a message can be saved in memory for future action or for replay.
- **Reply**—one user can reply to a message from another user on the system.

- **Security**—the password provides security and prevents unauthorized access.
- **Broadcast—a message can be spoken once and broadcast to the mailboxes of a number of voice mail system users.**
- **Tracking**—some systems will keep track of information, such as the number of messages sent, originators, and recipients.
- **Scan**—messages in the mailbox can be scanned before listening to the entire message.
- **Redirect**—a message can be rerouted to other voice mail system users.
- **Delivery verification**—the system will inform the sender when a voice message has been delivered.

Project 5 Evaluated to the satisfaction of the instructor.

Activity 4

Project 1 Drawings should be evaluated to the satisfaction of the instructor. The explanations should be similar to the following:

- **Star** network has clusters of personal computers in a star shape around a central network server. The terminals work from one main computer and can communicate with each other.
- **Ring** network connects components in a single, closed loop in which information moves clockwise. If one terminal is down, all terminals are down.
- **Tree (bus)** network is a single bidirectional communication link in which information moves sequentially. All terminals can send and receive information.

Project 2 Evaluated to the satisfaction of the instructor; however, the following may be used as a guideline.

1. **File server**—a computer used like an electronic file cabinet. Allows users to access and share the same storage area. The host computer contains the network software and storage is available to all the stations on the network. Files can be quickly saved and data can be transferred between files within this "file cabinet." Software is obtained from the file server; however, floppy drives should still be installed at each computer so outside information can be shared. Some network file servers are dedicated only to serving the network and are called slave computers. In other networks the server can do other processing while the network is in use.

2. **Workstations**—the microcomputers or terminals that are connected to the network and can share information through it.

3. **Channel**—with local area networks, cables usually join the stations together. It depends on the specific application whether twisted pair cables, coaxial cables, phone lines, fiber optic cables, or other cables are used.

4. **Software**—programs written specifically to coordinate the network hardware with the operating systems of the computers for ease and convenience of the users. Networking software controls the file server and acts as a communications "traffic cop." Record locking is used so that only one person at a time can modify a file. Security is determined by the network software.

Project 3 Evaluated to the satisfaction of the instructor; however, any five of the following may be used.

- **Traffic**—determine in advance the type and volume of data and use the proposed LAN can handle. Three reasons should be considered:
    - The higher the load on the network, the more muscle you will need in your file server, which is the hub of the network. Any application executed at the server level greatly affects the overall performance of the LAN.
    - If the network has numerous devices attached, an alternative should be considered.
    - Some types of LANs are slowed by extremely heavy traffic and the limitations must be kept in mind.
- **Performance**—consider the applications that will be used on the system. Most users simply want a network that keeps data bottlenecks and system failures to a minimum.
- **Number of attached devices**—the networking plan should allow for change. Try to predict how many hookups will be needed in each room or area.
- **Distance**—when measuring distances for the network, remember to include the distance from the device to the wall plug and from the plug to the ceiling.
- **Layout**—plan the network to include terminals on the same floor, on another floor, in other offices, etc. The network cables need to be protected from accidents and vandalism; therefore, wall access and ceiling/floor access are necessary.
- **Wiring**—a common method of wiring a multiflora LAN is to use coaxial or fiber optic cable for the "backbone" runs between local

wiring centers and unshielded twisted-pair wire for the "horizontal" runs between the wiring closets and network devices.

- **Bandwidth**—determines the capacity of a communications channel and the kinds of communications it can carry. At present, most office applications are limited to the transmission of voice and data signals.
- **Wire pulls**—fire and electrical codes stipulate that special smoke-resistant cabling be used in the air space above ceilings and below raised floors. Called plenum cable, this wiring costs three or four times as much as general-purpose wiring.
- **Security concerns**—because fiber is harder to tap than wire, it is commonly used where security is a concern. For routine security, passwords or encryption may be enough.
- **Software**—despite the increasing popularity of LANs, the majority of software is still written for stand-alone computers. Single-user software is usually not designed for file or data sharing. Some software manufacturers will not allow software to be copied unless a site license is purchased. Many network software packages are designed so that only a limited number of people can actually use the software at the same time.

Competency Test Answers

Evaluated to the satisfaction of the instructor.

Desktop Publishing 5-2

Lesson Plan

Essential Elements: 75.87 (c)(3)(B)
Allocated Time: 15 Hours

Unit Objective: Students will use appropriate terminology to discuss components and procedures related to layout, design, and desktop publishing and apply desktop publishing procedures to produce attractive documents.

Student Competencies: After completing this unit, the student will be able to:

1. Identify and use desktop publishing terminology.
2. Discuss components required for layout and design of desktop publishing products.
3. Demonstrate proper techniques for producing a publication using a thumbnail sketch, rough draft, and comprehensive layout.
4. Apply procedures for preparing text in word processing software and then importing the information into page layout software to insert appropriate graphics.

Focus: Using desktop publishing techniques has become an everyday activity in businesses today. Most businesses want their documents to look professional and attractive at a reasonable cost. If a beginning worker can demonstrate fundamental knowledge of desktop publishing and can perform the procedures accurately and efficiently, his/her usefulness to an employer increases.

Domains: Activities and competency tests provide learning experiences within the cognitive, psychomotor, or affective domains and are coded on the Activity and Competency Test Matrices.

Basic Skills: Activities and competency tests reinforce the basic skills of reading, writing, and/or mathematics and are coded on the Activity and Competency Test Matrices.

5-2 Desktop Publishing

Content Outline

Desktop publishing overview

Primary goal

Desktop publishing components

Hardware
Software

Planning a design

Planning a design
Selecting the right document
Using balance and emphasis

Creating the page layout

Graphic elements
Steps in layout

Operational procedures

Software manuals
The desktop publishing process

Desktop Publishing 5-2

Teacher Activities

Teacher Preparation

- ☐ Preview the unit.
- ☐ Review unit objectives.
- ☐ Make instructional analysis.
- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or affective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Suggestions

☐ Prepare bulletin boards with pictures of various types of hardware and software for desktop publishing components.

☐ Invite a speaker to discuss and demonstrate capabilities and advantages of desktop publishing in a business environment.

☐ Obtain literature about DTP hardware and software available for use with microcomputers.

☐ Arrange a field trip to a location where desktop publishing is being used. One suggestion is to go to your local newspaper.

☐ Have someone compare previous methods used in publishing documents and desktop publishing.

☐ Have the students collect clip art from newspapers, magazines, flyers, etc. to get graphic ideas for their activities. If the students wish to use any of the examples, the art can be scanned and imported into their documents.

☐ The simulation for this unit is *Texas Country's Best Videos.* You can use this as a culmination activity or test for the unit or save it for the course closure. The simulation stresses desktop publishing activities. Refer to the special products pages located at the front of this book for additional simulations that can be used if this course is the only office education course taught at your school.

☐ Remember to use the *Test Builder Program* and the related test bank.

Activity 2

Secure copies of magazines, catalogs, pictures, etc. of desktop publishing components for the students to use for their notebooks.

Activity 3

Another suggestion for the students is to create a flyer for a recycling day in your community.

Activity 2

Projects 2-4 Provide the students with the company and organizational charts they created in *Section I, Unit 2*. They will need this information to create the letterhead, envelopes, and business cards. You will need to provide good bond and envelopes for the final copies, but for practice copies you can cut paper to the size needed for the envelopes.

Competency Test

The students can use the clip art, collected pictures and art, dingbats, or an actual graphics program to create the artwork needed for the test. Scan the pictures into the program so the students can import the graphics into their brochures. You may add other requirements such as specific fonts or a specific layout. Provide the students with any additional instructions you may require.

Matrices

ACTIVITY MATRIX

Activities	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
1	X			X	X	
2 Project 1	X	X		X		
Project 2	X			X	X	X
3 Project 1	X	X			X	X
Project 2	X	X			X	X
Project 3	X	X			X	X
4 Project 1	X	X		X	X	X
Project 2	X	X		X	X	X
Project 3	X	X		X	X	X
Project 4	X	X		X	X	X

COMPETENCY TEST MATRIX

Parts	Domains			Basic Skills		
	Cognitive	Psycho-motor	Affective	Reading	Writing	Math
I	X	X		X	X	X

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Desktop Publishing 5-2

Competency Test

Create a brochure (two or three columns) that illustrates desktop publishing technology. For each component used in desktop publishing, have artwork that illustrates the component (i.e. a picture of a mouse, a picture of a keyboard, etc.). Be sure to define each component or term used in the brochure. Design the layout and create a thumbnail sketch, a rough draft, and the comprehensive layout.

U

Activity Answers

Activity 1

```
  T   F O N T S   B A L A N C E
  H   O       T         S
  U   R       Y         C             C
  M   M     A L I G N M E N T         R
I B E A M     E         N             O
  N   T       S   H A N D L E S       P
  A     C     H         E             P
B I T M A P P E D       R     L       I
  L     M     E               A       N
  S   D E S K T O P P U B L I S H I N G
  K     R                     E
  E     A         R O U G H D R A F T
  T   F R A M E S             P       B
  C     E           C L I P A R T     A
  H     A         I           I       S
      P D L   C O M P R E H E N S I V E
        Y     A   A           T       L
              D   G   B U L L E T S   I
                  E           R       N
                                T O N E
```

Activity 2

Projects 1-2 Evaluated to the satisfaction of the instructor. The students should include hardware (computer, monitor, printer, mouse, etc.) and software (word processing, desktop publishing, graphics, etc.).

Activity 3

Projects 1-3 Evaluated to the satisfaction of the instructor.

Activity 4

Projects 1-4 Evaluated to the satisfaction of the instructor.

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Competency Test Answers

Evaluated to the satisfaction of the instructor.

SECTION 5

Information Processing Tools

Unit 1: Telecommunications

Unit Objective: Students will gain an understanding of the concepts of exchanging data through telecommunications, including electronic mail, bulletin boards, on-line information services, and facsimile transmissions. They will also discuss network configurations and components.

Student Competencies: After completing this unit, the student will be able to:

1. Define terminology related to telecommunications and networks.
2. Identify equipment needed for telecommunications.
3. Discuss and apply procedures for communicating with electronic bulletin boards, on-line information services, electronic mail, voice mail, and facsimile transmissions.
4. Discuss equipment requirements for network configurations.

Focus: Telecommunications and networks are growing in importance within the business world. Information can be received, sent, and shared in a few moments rather than a few days. Having timely information increases accuracy and productivity; therefore, all personnel need to know the basics of telecommunications and networking.

5-1 Telecommunications

Terminology

Acoustic coupler	A type of modem that uses a telephone handset to connect the phone line to the computer.
Analog signal	The kind of electronic signal used in telephone line transmission.
Baud rate	A measure of the number of bits per second transmitted.
Bulletin board	An application of telecommunications in which information is made available to subscribers electronically, much like a printed newsletter.
Channel	The connection between the sender and the receiver.
Common carrier	An organization, such as the telephone company, authorized by the FCC to offer communication services.
Demodulation	Conversion of a signal from analog to digital.
Digital signal	The electronic pulses produced and recognized by a computer.
Distributed processing	Processing that is done at several locations on several computers that could otherwise be accomplished at a central, single location (computer).
Download	To receive a data file from another computer.
Electronic mail	The electronic transmission via communications channels of traditional mail such as letters, memos, or messages.
Fiber optics	A means of transmission using glass fiber.
File server	The host computer in a network that coordinates communication and has central storage capability available to the network.
Front end processor	A computer connected to a mainframe for the purpose of controlling (terminal controller) data input and output.

Full duplex	A communication protocol which enables transmission of data two ways at the same time.
Half duplex	A communication protocol which allows transmission in only one direction at a time.
Handshaking	A process in which the receiving computer sends a signal to tell the sending computer that it is ready to receive data.
Hard-wired	Two computers or devices are connected by wire rather than phone lines.
Host computer	The file server in a local network or the mainframe in other networks.
LAN	An acronym for Local Area Network; a network that is limited to one room, building, or complex.
Leased lines	A telephone line that is reserved for use by a computer or user.
Microwave transmission	A channel for sending data by microwaves using a series of relay stations.
Modem	Short for modulator-demodulator. It connects the computer to the telephone system.
Modulation	Conversion of a signal from digital to analog.
Multi-drop line	A communication line that connects several computers.
Multiplexing	Messages from several low-speed sources combined onto one high-speed line.
Multistar	A network configuration in which mainframes, each with its own star network, are connected.
Networking	Linking computers or computer peripherals via communications channels to share data or information.
On-line processing	Processing that takes place with the user in direct communication with the computer as the transaction occurs.
Parity	A method of verifying the accuracy of data that is transmitted by means of an extra bit that is either odd or even.

Password	Coded identification required to access some bulletin boards and information services.
Polling	The line is controlled by the host computer asking each terminal, in turn, if it has a message to send.
Protocol	A set of rules in a communication system for exchange of information between computers.
Ring	A local area network in which the workstations are connected to each other, but without a central host.
Satellite transmission	Transmission using communication satellites.
Serial	A data transfer format in which data are sent one bit after another.
Slave computer	The host or file server when it is used only for coordinating the network.
Star	A network configuration in which a central computer is directly connected to each terminal.
Switched line	A normal telephone line.
Telecommunications	The electronic transmission of information, whether it be voice or data.
Terminal	An input-output device that is used to access data from a computer.
Token ring	A type of ring network in which messages need not pass to adjacent stations.
UNIX	A popular operating system for microcomputers used in a multi-station configuration.
Upload	To send a data file from one computer to another.
Voice mail	The transmission of voice waves with the output being a printed copy. The process of digitizing changes of the voice waves into digital signals that can be reproduced by a computer and, subsequently, a printer.

Telecommunication equipment

☐ System requirements—for two computers to communicate with each other, a number of elements must be present.

- ▲ Computer or terminal

  Any microcomputer is capable of being used in data communications. It is possible to make a connection without purchasing special software, but it is inconvenient and requires advanced knowledge. There are several programs available for most of the popular microcomputers that make data communication easy. Generally, information appears on the screen to guide the user through the procedures.

- ▲ Modem or MOdulator-DEModulator

  A modem is an electronic device that converts the digital pulses produced by the computer as coded data into analog information. The coded data can then be sent over standard telephone lines in much the same way as a voice is sent. The information received from the sending computer is converted from the analog signal to the original digital signal which the receiving computer can interpret.

  Types of modems

  - Acoustic coupler modem
    - Used during the early days of microcomputers. Consists of a circuit board in the computer which sends data serially—one bit at a time—connected to an external device that is shaped to fit the handset of any telephone. This circuit board is the same type of board that is used to connect a serial printer to a computer.
    - The signals produced by the computer are then converted by the modem into tones which are sent through the telephone's microphone. The telephone hears the tone made by the analog signals coming in, and the modem then converts them into digital signals. A user can hear the tones through the receiver.
    - Operates at 300 bits per second (this refers to the baud rate).

- Direct-connect modem
  - This type of modem is faster and more reliable than the acoustic modem. It can be located either internally or externally. It is connected directly to the phone line, so it does not use a handset.
  - Can operate at a baud rate of 1200, 2400, 3600, or more bits per second.

Communication protocol

- Both computers must be equipped with a modem that follows the same protocol or specifications for sending and receiving data to communicate.
  - This means that both must send/receive at the same baud rate (bits per second) and observe the same parity.
  - Parity refers to a method for checking the accuracy of data by comparing the number of bits at both the sending and receiving ends.
  - With even parity, the number of bits should always be even; with odd parity, all must be odd.
- The modem connection can be "full duplex," meaning data can be transmitted in both directions at the same time, or it can be "half duplex," meaning that data can be sent by only one computer at a time.
- Receiving computer
  - The communication is complete when the computer at the other end receives the demodulated data.
  - No connection takes place unless all components are present, and both computers are on-line, just as in an ordinary telephone conversation.
  - The receiving computer's software causes the decoded data to be displayed on the screen or directed to disk storage for later access.

▲ Channels

- The channel used most often is the standard telephone line.
- Commercial systems use a variety of other channels such as microwave or satellite transmission. These systems beam signals from one point to another in the same way that radio or television signals are transmitted, but at different frequencies.

- Microwave transmitters use relay stations called repeaters to retransmit signals from one antenna tower to the next because direct microwave transmission distances are limited.
- Fiber optics use special telephone lines through which a laser-generated light sends signals.

☐ Data communication procedures

- ▲ Once a connection is made, the software determines what happens to the data.
- ▲ The computer system is started up with the modem in place and connected to a telephone.
- ▲ A communications software program is executed.
- ▲ When ready, the destination number is dialed using pushbuttons on the phone or the computer keyboard.
- ▲ If the receiving station is on-line, it will generate a tone (equivalent to saying "hello") which is recognized by the modem and the communication link is established.
- ▲ What happens next depends upon the nature of the software.

Communication services

☐ **Electronic bulletin board systems (BBS)**—these systems get their name because users can post announcements and messages that become available for others to read, use, and answer. The bulletin board is really just disk storage with a special program that manages the data. A computer user who calls the number of the bulletin board computer can access the software and choose options from a menu. A BBS is considered a specialized form of electronic mail service.

- ▲ Bulletin board owners

  User groups, organizations of computer users, run many of the bulletin boards. Others are owned by computer stores, special interest groups, or even individuals. Some of the larger clubs have bulletin boards with several phone lines.

- ▲ Topics

  A typical BBS will offer a menu of varied topics ranging from technical help and software updates to public domain software and games. Most will also have news, events, or messages of interest to members.

- Access and membership
  - Access to user group BBSs is often free, but one must become a member to upload and download files or to access certain areas (files) from the menu. In some cases only members of the user group are eligible to join the bulletin board.
  - Some systems require a fee to join.
  - Membership in a BBS means having an account number and/or password which must be used at log-on time (when beginning a session).

- **On-line information services**—these services offer massive amounts of information to microcomputer users. They operate from mainframes with extensive, high speed disk storage.
  - Services
    - Compu-serve is probably the best known of the services because membership can be purchased as a package at most computer retail stores at a nominal cost. A wide variety of information is accessible.
    - The Source is one of the earliest of these services and it offers similar categories of information as Compu-serve.
    - Prodigy is a newcomer rivaling Compu-serve for this market. This service offers much of the same information that Compu-serve offers with a competitive price.
    - Star-text is an excellent news service sponsored by the *Fort Worth Star-Telegram.*
    - Texas Education NETwork (TENET) allows communication with educators and students all over the world.
  - Topics
    - **News**—current events, features, or anything found in the daily paper.
    - **Stock market information**—up-to-the-minute prices from the New York Stock Exchange.
    - **Research material**—somewhat like a library; information on various topics.
    - **Public domain software**—these programs can be downloaded to the member's own computer.
    - **Announcements and messages**—similar to the services on some bulletin boards.

- ▲ Membership costs

  The fee for subscribing varies among the services. There is an additional charge for access time, usually calculated in portions of hours. Some services have a minimum monthly fee which is paid even if there is no usage. Because of the cost of access time, it pays to have a fast modem.

☐ Electronic mail concepts (E-mail)—E-mail is the electronic transmission and storage of messages from the sender to the receiver. Using E-mail does not require the concurrent presence of both the sender and the receiver. Information can be viewed at the receiver's convenience. Many bulletin boards and on-line information services offer some E-mail features. Access to E-mail systems is similar to the other services and it is available on a subscription basis.

- ▲ Advantages of using E-mail
  - Messages can be delivered at a set time.
  - Cuts communication time from days to minutes.
  - Can permanently store and recall messages.
  - Each member has a "mailbox" in which others can leave messages that will remain until the owner chooses to erase them.
  - People who travel can access their E-mail from any terminal.
  - Messages can also be stored and forwarded to a computer at another location.
- ▲ Forms of electronic mail
  - A telegram is the oldest type of electronic mail. Samuel Morse developed the telegraph in 1835.
  - Mailgrams are messages that are transmitted to the local post office from Western Union and then printed. The mailgram is delivered the next day with the regular mail.
  - Telex/TWX are operated by the Western Union Telegraph Company. They are similar to the conventional telephone network, but they use teleprinters and hardcopy output instead of telephones and voice communication.
  - Communicating word processors expand E-mail's capability. They simplify composing and editing messages.
  - Computer hardware- and software-based systems are used in the preparation, transmission, storage, and retrieval of messages.
- ▲ When deciding which form of E-mail to use include length of the message, volume of usage, speed of transmission, and form of response needed.

  - A user can enlist a third-party service bureau to create and maintain his/her electronic mailbox on disk. The user then accesses the mail by providing the proper identification at his/her own computer.

- Voice messaging or voice mail—was developed as a new "toy" in the office. However, voice mail surprised everyone with its usefulness. In the early 1980s, voice mail was limited to a type of answering machine which could be accessed for any messages left. The messages were stored digitally in the memory of a dedicated computer system. Voice mail is best suited to the rapid exchange of brief messages.

  - An advantage of using voice mail instead of E-mail is that the user only needs a push-button phone to access the system.

  - A disadvantage of using voice mail instead of E-mail is that there is no permanent written record of the message unless it is separately transcribed.

  - Some significant advances include:
    - Voice messaging software has matured.
    - The cost of the processors and other hardware has decreased.
    - Information storage cost has decreased.
    - It takes less memory to store greater amounts of digitized voice.
    - Integration of voice mail functions with private branch exchanges has added telephone answering, call forwarding, and message waiting notification capabilities. Having this integration allows for more sophisticated and dedicated equipment to be added.

  - Hardware requirements
    - Businesses with five to ten telephones need at least a PC XT (20MG hard disk) with a voice data board. This system will answer a call with a standard, impersonal greeting.
    - A dedicated minicomputer is necessary for more powerful voice mail systems.
    - Integration with Centrex or PBX will allow the caller to leave personal messages.

  - Features of voice mail
    - **Edit**—the user can edit sections of a message.
    - **Save**—a message can be saved in memory for future action or for replay.
    - **Reply**—one user can reply to a message from another user.

- **Security**—the password provides security by preventing unauthorized access.
- **Broadcast**—a message can be spoken once and broadcast to the mailboxes of a number of voice mail system users.
- **Tracking**—some systems will keep track of information, such as the number of messages sent, originators, and recipients.
- **Scan**—messages in the mailbox can be scanned before listening to the entire message.
- **Redirect**—a message can be rerouted to other voice mail system users.
- **Delivery verification**—the system will inform the sender when a voice message has been delivered.

- **Facsimile (FAX)**—facsimile transmission is sending images of documents by means of radio waves or telephone lines. The images are stored digitally in the computer's memory. Images can be sent and received using modems. The computer's graphics or laser printer is used for output.
  - A FAX machine is actually a printer, scanner, telephone, and copier combined into one machine. The major component of a FAX machine is a scanner that converts an image into an encoded audio signal. An image is sent over telephone lines to the receiver and is demodulated and impressed on paper by one of several techniques. A FAX scans a page in lines. The closeness of the lines determines the resolution which establishes the print quality.
  - The price of FAX machines has made them attractive to small businesses and individual users. Some now plug directly into a microcomputer.
  - Standard features and capabilities of facsimile machines include telephone functions that have speed and memory dialing, delayed and automatic redial, storage, broadcasting, answering, and polling.
  - FAX machines generally have the same basic steps for operation: dialing the number, listening for the tone, and starting the transmission. A cover sheet should be the first page of the transmission. The person to receive the FAX, the person sending the FAX, the number of pages, the business letterhead or logo, and a phone number of the sender should all be included on a cover sheet.

- Importance and future of telecommunications

Planners and forecasters believe we have just scratched the surface in the use of telecommunications. More hobbyists and personal computer users are discovering the convenience and fun of bulletin boards and the wealth of information at their fingertips through information services. Communication services are not yet an indispensable part of most lives. Many forecasters predict that we will soon pay our bills by phone, check our computers for messages wherever we go, and receive most of our education at home in front of a computer.

- The IRS is currently using telecommunications to help speed up the process of filing taxes. Some forecasters predict that this method of filing taxes will become the common practice.
- Businesses worldwide are depending on telecommunications to send and receive information rapidly each day.

Network concepts

- Network configurations
  - **LANs** (Local Area Networks) have terminals located in close proximity so all the terminals on the network are connected by cable.
  - **Star** network has clusters of personal computers in a star shape around a central network server. The terminals work from one main computer and can communicate with each other.
  - **Ring** network connects components in a single, closed loop in which information moves clockwise. If one terminal is down, all terminals are down.
  - **Tree (bus)** network is a single bidirectional communication link in which information moves sequentially. All terminals can send and receive information.
- Common components
  - **File server**—a computer used like an electronic file cabinet. Allows users to access and share the same storage area.
    - The host computer contains the network software and storage is available to all the stations on the network.
    - Files can be quickly saved and data can be transferred between files within this "file cabinet."
    - Software is obtained from the file server; however, floppy drives should still be installed at each computer to share outside information.
    - Some network file servers are dedicated only to serving the network and are called slave computers. In other networks the server can do other processing while the network is in use.
  - **Workstations**—the microcomputers or terminals that are connected to the network and share information through it.

- **Network hardware**—each workstation has a circuit board that provides the interface hardware and firmware to establish the communication link.

- **Channel**—with local area networks, cables usually join the stations together. The specific application determines whether twisted pair cables, coaxial cables, phone lines, fiber optic cables, or other cables are used.

- **Software**—programs written specifically to coordinate the network hardware with the operating systems of the computers for ease and convenience of the users. Networking software controls the file server and acts as a communications "traffic cop." Record locking is used so that only one person at a time can modify a file. Security is determined by the network software.

☐ The purpose of networking and any multi-user system is sharing information and distributing work. This is accomplished according to the type of equipment being used, the geographical distribution, and the kinds of the work being done.

- In distributed data processing, an organization might have one large central computer with files that will be accessed and updated by stations throughout the region.
  - For greater efficiency, work that does not require on-line access of the master files can be done at the remote sites.
  - Sometimes each of several computers in the system is assigned some of the central work.

- With a local area network, workers in each office in a building can access certain files as needed without having to leave their desks. Each computer can be used as a stand-alone computer, and users only log onto the network when needed. Messages can be sent from one workstation to another.

- LANs are linked together with coaxial cables or another form of channel and are located close to the other terminals.
  - The file server allows access of the software and public files.
  - Each terminal user can access the program needed.
  - After the user has completed the work, information is sent back to the file server so someone else can use the information without asking for a hardcopy or a copy of the disk.

- Larger networks link a minicomputer or a mainframe with a series of individual computers. These larger computers link to other large computers through the use of telephone lines, fiber optics, satellites, etc.
  - Information sent from a terminal must be coded through the multiplexer and the modem before entering the channel.

    - As information flows through the channel and is accepted by the receiving modem and multiplexer, it is transferred to the front-end processor which controls the input.
    - When the information is received by the mini or mainframe computer, it is stored for later use by a single workstation or another network.

☐ Network set up and installation

- Setting up a network is a job for trained professionals. Most large systems require custom installation to meet the needs of the organization. Those doing the work must have a technical understanding of the hardware, the operating system, and the network software.
- There are network boards and software packaged with installation instructions that cost only a few hundred dollars for up to four microcomputers. Because these come with no technical support, the user should be prepared to experiment and should try to find someone who has been through the process.
- Once a network is installed, starting up a session is not too different from logging onto a bulletin board or information service.
- Ten of the most common issues involving network installation include:
    - **Traffic**—determine in advance the type and volume of data and use the proposed LAN can handle. Three reasons should be considered:
        - The higher the load on the network, the more muscle you will need in your file server, which is the hub of the network. Any application executed at the server level greatly affects the overall performance of the LAN.
        - If the network has numerous devices attached, an alternative should be considered.
        - Some types of LANs are slowed by extremely heavy traffic and the limitations must be kept in mind.
    - **Performance**—consider the applications that will be used on the system. Most users simply want a network that keeps data bottlenecks and system failures to a minimum.
    - **Number of attached devices**—the networking plan should allow for change. Try to predict how many hookups will be needed in each room or area.
    - **Distance**—when measuring distances for the network, remember to include the distance from the device to the wall plug and from the plug to the ceiling.

- **Layout—**plan the network to include terminals on the same floor, on another floor, in other offices, etc. The network cables need to be protected from accidents and vandalism; therefore, wall access and ceiling/floor access are necessary.

- **Wiring—**a common method of wiring a multiflora LAN is to use coaxial or fiber optic cable for the "backbone" runs between local wiring centers and unshielded twisted-pair wire for the "horizontal" runs between the wiring closets and network devices.

- **Bandwidth—**the bandwidth determines the capacity of a communications channel and the kinds of communications it can carry. At present, most office applications are limited to the transmission of voice and data signals.

- **Wire pulls—**fire and electrical codes stipulate that special smoke-resistant cabling be used in the air space above ceilings and below raised floors. Called plenum cable, this wiring costs three or four times as much as general-purpose wiring.

- **Security concerns—**because fiber is harder to tap than wire, it is commonly used where security is a concern. For routine security, passwords or encryption may be enough.

- **Software—**despite the increasing popularity of LANs, the majority of software is still written for stand-alone computers. Single-user software is usually not designed for file or data sharing. Some software manufacturers will not allow software to be copied unless a site license is purchased. Many network software packages are designed so that only a limited number of people can actually use the software at the same time.

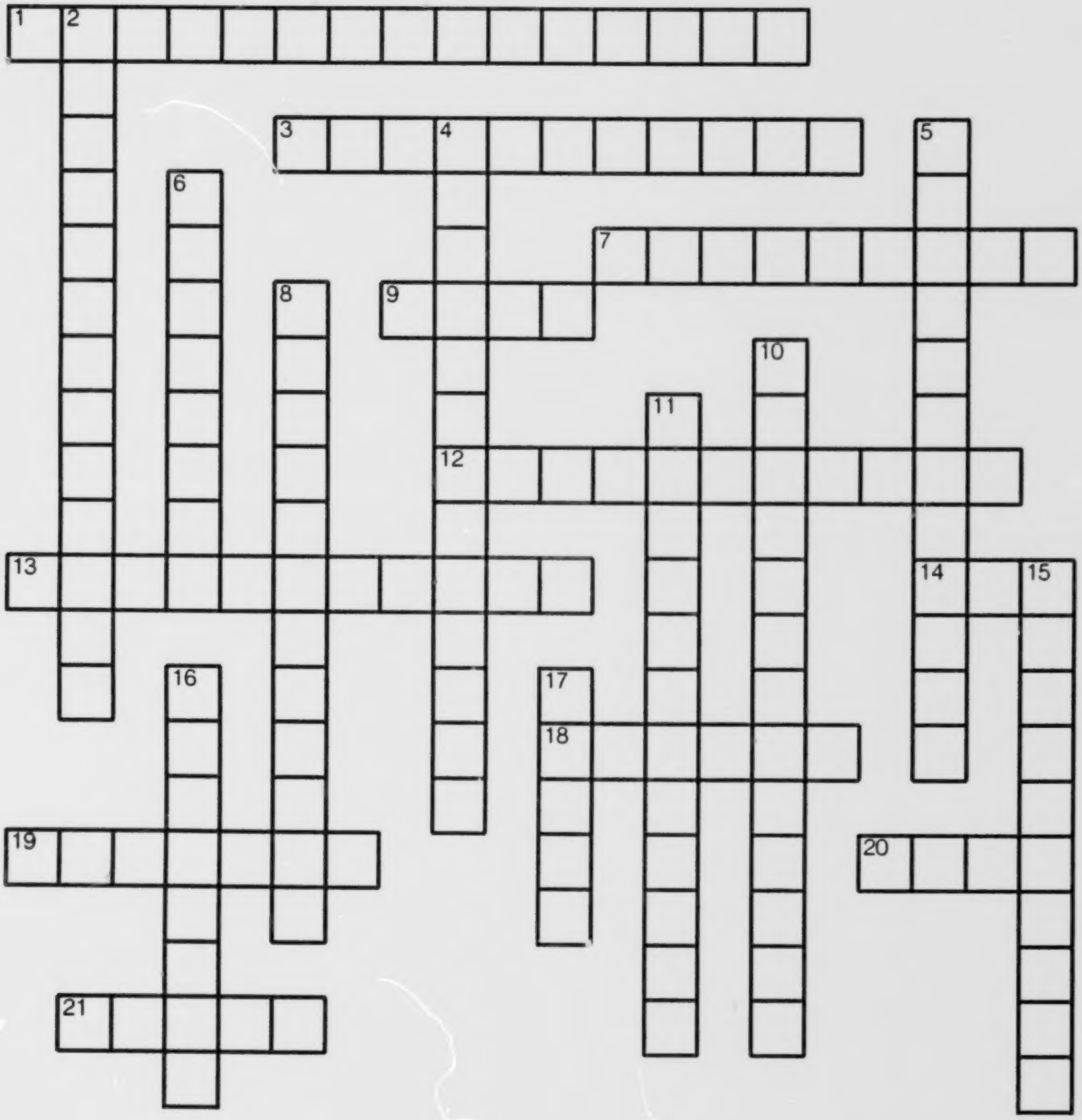
☐ Network advantages

- ▲ Data files can be accessed and shared.
- ▲ Messages from others on the network can be sent and received.
- ▲ Backup computers are available when needed. The crisis that could occur when a computer "goes down" is avoided when another microcomputer can access the file server or other stations.

☐ Network disadvantages

- ▲ Selecting, installing, and managing the network hardware and software is costly and difficult.
- ▲ Dependency on the central files without adequate backup can cause loss of data and costly and lengthy recovery. If the file server is down, the whole network is down.

ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE



ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE CLUES

ACROSS

1. A type of modem that uses a telephone handset to connect the phone line to the computer.

3. A process in which the receiving computer sends a signal to tell the sending computer that it is ready to receive data.

7. A type of ring network in which messages need not pass to adjacent stations.

9. A local area network in which the workstations are connected to each other, but without a central host.

12. A telephone line that is reserved for use by a computer or user.

13. A means of transmission using glass fiber.

14. An acronym for local area network; a network that is limited to one room, building, or complex.

18. Processing that takes place with the user in direct communication with the computer as the transaction occurs.

19. The connection between the sender and the receiver.

20. A network configuration in which a central computer is directly connected to each terminal.

21. The electronic transmission via communications channels of traditional mail such as letters, memos, or messages.

DOWN

2. An organization, such as the telephone company, authorized by the FCC to offer communication services.

4. The electronic pulses produced and recognized by a computer.

5. A normal telephone line.

6. A measure of the number of bits per second transmitted.

8. The file server in a local network or the mainframe in other networks.

10. An application of telecommunications in which information is made available to subscribers electronically, much like a printed newsletter.

11. Conversion of a signal from analog to digital.

15. Linking computers or computer peripherals via communications channels to share data or information.

16. To receive a data file from another computer.

17. It connects the computer to the telephone system.

ACTIVITY 2: TELECOMMUNICATION EQUIPMENT

In your own words, explain the equipment needed for telecommunications.

Activities

ACTIVITY 3: COMMUNICATION PROCEDURES

Project 1

Use either a simulation or a communications system to contact a local BBS to upload and download information specified by your instructor.

Project 2

Use either a simulation or go on-line with TENET (or similar service) and download current information requested by your instructor.

Project 3

Using an electronic mail system (or simulation), prepare the following memo and send it to at least two people.

(current date)

TO: All Department Managers

Effective immediately, the new supervisor for the loading dock will be Ms. Jane Doe. She is to be congratulated for this promotion and given all the privileges and responsibilities of her new position.

I also want to give you events occurring this month. I will contact you later on which days and the times each event will take place.

(current month)

Monthly meeting

Monthly projections deadline

Career Day with local high school students

Evaluations deadline

Planning committee meeting

For more information on the above events, contact my computer at 5490084.

(initials)

Project 4

Write a paragraph about voice mail. Describe at least three voice mail features.

Project 5

Working in a group, design a FAX cover sheet. Do not make the cover sheet elaborate or with a lot of blocks on it because transmission will take longer and, therefore, cost more. After completing the cover sheet, use the document provided by your instructor to send a FAX.

ACTIVITY 4: NETWORKS

Project 1

Draw and then explain the three network configurations.

Project 2

Describe the following network components and explain how each works in the network.

1. File server

2. Workstations

3. Channel

4. Software

Project 3

List and explain five of the most common issues involving network installation.

SECTION 5

Information Processing Tools

Unit 2: Desktop Publishing

Unit Objective:

Students will use appropriate terminology to discuss components and procedures related to layout, design, and desktop publishing and apply desktop publishing procedures to produce attractive documents.

Student Competencies:

After completing this unit, the student will be able to:

1. Identify and use desktop publishing terminology.
2. Discuss components required for layout and design of desktop publishing products.
3. Demonstrate proper techniques for producing a publication using a thumbnail sketch, rough draft, and comprehensive layout.
4. Apply procedures for preparing text in word processing software and then importing the information into page layout software to insert appropriate graphics.

Focus:

Using desktop publishing techniques has become an everyday activity in businesses today. Businesses want their documents to look professional and attractive at a reasonable cost. If a beginning worker can demonstrate fundamental knowledge of desktop publishing and can perform the procedures accurately and efficiently, his/her usefulness to an employer increases.

5-2 Desktop Publishing

Terminology

Alignment	Function that determines position of type—left, right, centered, justified.
Ascender	The part of a lowercase letter above the height of a lowercase x, such as the upper parts of h, d, or b.
Balance	Arranging text and graphics on a page in a pleasing way.
Baseline	The line of writing on which the main part of the letters rests.
Bit mapped	A method used by laser printers that produces individual letters by forming a pattern of pixels (screen dots).
Bullets	Small black dots or other characters used to call attention to a portion of text, usually specific points or lists.
CAD	(Computer Aided Design) Refers to software used in doing drawings or designs.
Camera ready	Final copy of text and illustrations (comprehensive layout) ready for reproduction.
Clip art	A collection of professionally drawn symbols, letters, and pictures that can be used freely because it is in the public domain.
Clipboard	An area of memory that is used for saving portions of work that will be inserted somewhere else at a later time.
Comprehensive layout	The final camera-ready copy (or ready for photocopies to be made if camera is not used).
Cropping	Cutting off parts of an image or drawing to make it fit or show only selected areas.
Descender	The part of a letter below the baseline.
Desktop publishing	Utilizing a personal computer, appropriate software, and an output device to combine text and graphics to produce a document.

Dingbat	A nonspecific typographic ornament, such as an arrow or a star.
Emphasis	Arrangement of elements on a page to attract attention to the most important element.
Fonts	Complete assortment of typefaces and sizes, including upper- and lower-case letters, punctuation, and numerals.
Format	The size, shape, form, proportions, margins, and overall design of a printed item.
Frames	"Containers" that hold the various elements of art and text in a document.
Gutter space	The space between columns.
Handles	Markers on a frame or graphic line that must be accessed (activated or clicked on) before moving or changing that element.
Hyphenation	A feature that aids alignment by correctly breaking words that extend to another line.
I-Beam	The form taken by the cursor (a capital I) when it is in the work area of a publication.
Image	A copy of a photograph or scanned document that is digitized and stored in memory or on disk.
Kerning	Adjusting the spacing between certain letters to make more efficient use of space and improve appearance.
Laser printer	A printer that produces a high degree of resolution by using a laser beam.
Layout	The way text and graphics are placed on a page.
Leading	The distance between lines of type, measured in points from the baseline of one line of type to the baseline of the next line.
Mouse	A pointing device that lets the user move the cursor or pointer around the screen more easily than using the keyboard.

Page description language (PDL)	A computer programming language whose vocabulary can express the description and placement of text and graphic elements on a page.
Paste	Inserting an existing picture or section of text into an area on a page.
Pica	The standard unit of typographic measurement for font size, line leading, and rule thicknesses; equal to 1/6 inch.
Point	The standard unit of typographic measurement for font size, line leading, and rule thicknesses; equal to 1/72 inch.
Postscript	Printer language that provides a great assortment of font styles for any software program.
PUB	One of the file extensions used for publication files on PC and MS-DOS computers.
Resolution	A measure of the number of dots per inch on a display screen or an output device such as a printer.
Rough draft	A layout drawn to actual size with the fine points not included.
Serif	A light line or stroke extending from the main stroke in a letter.
Spacing	Arranging words or letters at proper intervals.
Style sheet	Layouts that can be saved on disk for use with any document.
Thumbnail sketch	The beginning ideas of layouts drawn on a small scale to aid in selection of the best arrangement.
Tone	Relating the style of type to the message.
Typeface	A complete set of characters in a particular design or style.
Typestyle	Normal, bold, italic, underline, outline, shadow, etc.
White space	The blank or unused portions of a page.
WYSIWYG	An acronym for "what you see is what you get."

Desktop publishing overview

- The primary goal of desktop publishing is the production of a page. Desktop publishing uses a personal computer, appropriate software, and an output device to combine text and graphics to produce a document.
  - The old production process
    - The text or "copy" for a publication would arrive in draft form. The designer would do a word count and preliminary layouts showing the estimated "copy fit" or size of the text when it was put on the page. Then the draft copy would be marked up with instructions for the typesetter.
    - The type would come back from the typesetter as galley proofs or long columns of typeset words not yet formatted into pages. Working with the galleys, the designer would produce detailed layouts, showing the position of type, photos and illustrations on each page. These would go along with the galleys to the client for proofreading.
    - Corrections or revisions were recycled back through typesetting and tissue layouts. This loop would be repeated until the client was satisfied with the result. It was generally at this stage that photo captions, sidebars and other special items were created and sent out for typesetting.
    - The next stage was paste-up of the elements into pages, which were photocopied and sent to the client for approval. Illustrations were done at the paste-up stage. Any changes made by the client would be sent back to the typesetter, and then pasted onto pages, and new proofs sent out. This loop would be repeated until the client was satisfied.
    - The camera-ready art was then marked for color and sent to the printer.
    - The major disadvantage in the traditional method was the number of different people manipulating the text and number of proofs, resulting in time delays and communication challenges, increasing the possibility of error.

- ▲ Benefits of desktop publishing
    - **Cost saving—**time, materials, and labor.
    - **Control—**information is usually more accurate than if sent outside the company. The source of need is in-house and the information is kept up-to-date.
    - **Speed—**the information is kept up-to-date and can be obtained in a timely manner.
    - **Convenience and quality—**because desktop publishing need not be centralized, information can be used in a wider variety of documents.
    - **Security and autonomy—**in the business world, it is much simpler for businesses to perform a task themselves than to explain the process to someone else. The design and layout can be kept personal. Sensitive material can be kept confidential if only one or two are working on a document and it does not leave the company.

Desktop publishing components

- ☐ Hardware
    - ▲ Computers—professional-level software is written to run on MS-DOS or Macintosh systems. Speed of the microprocessor is important.
        - Hard drives are required because most software programs have six or more disks and running programs from floppy disks can be confusing and time consuming. The hard drives should be at least 100 to 120 MEG because of the amount of storage space used by graphics.
        - The Macintosh software requires at least a Macintosh Plus with 2 to 4 MEG memory to work.
        - For both the MS-DOS and the MAC systems, internal memory can range from 1 MEG to 8 MEG, depending on program sophistication.
    - ▲ Printers—a laser printer is a must for in-house desktop publishing.
        - A laser printer is used for desktop publishing because it can produce a high-quality printed document.
        - Many laser printers have the Postscript language built in, which provides a great selection of fonts. These types of printers use a Page Description Language (PDL). PDL works with the entire page and creates type in virtually any size and variation by means of reference points for each letter form. It is currently the most versatile printer available.

        - Laser printers that do not use PDL are usually compatible with the Hewlett-Packard family of laser printers. They use downloadable, bit mapped fonts from the computer rather than from the printer itself, which produces letters by individually mapping each one. These printers are usually less expensive than Postscript printers, but can be limiting when performing desktop publishing activities.

    - Monitors
        - Professional desktop publishing software works better with high resolution monitors, such as Hercules compatible, EGA, or VGA.
        - Full-page monitors have screens shaped like a standard page and have high resolution. This type of monitor allows the user to see the entire page.
        - Dual-page monitors allow two pages to be seen side-by-side, which helps when working with two-page document layouts.
    - Mouse—a small pointing device that allows the user to move the pointer around the screen by moving the mouse on the table top. A mouse is a necessity when using desktop publishing programs. Using the keyboard for moving the pointer and selecting commands is tedious.
    - Image scanners are tools that will transfer photographs, illustrations, and logos into the computer for storage on a disk. These images can then be positioned in the publications.

- Software
    - Word processing software is used to key and edit copy before it is imported or placed into the page layout program. The two programs must be compatible. Word processing programs are becoming more sophisticated and can perform most of the functions performed by a dedicated page layout program. Word processing programs such as *Microsoft Word* and *WordPerfect* provide excellent formatting and text-handling functions.
    - Graphics software is used to enhance documents with graphs, charts, pictures, line drawings, logos, page decorations, clip art, and scanned images. These images are transferred to page layout software and into the document before printing.
    - Page layout software packages allow the user to mix the text from the word processing programs with images from the graphics programs.
        - There is a wide range of programs that vary in price from under $100 to more than $1,000.
        - Two programs that dominate the business marketplace are Aldus *Pagemaker* and Xerox *Ventura Publisher.*

  - Many MS-DOS page layout packages require *Microsoft Windows* to operate. Sometimes it is included in the packages.

Planning a design

- When planning a design use the following guidelines:
  - **Purpose**—what action do you want the reader to take? The purpose is generally to persuade the reader to change his/her mind, to inform the reader of an upcoming event, to entice the reader to buy a product, or to simply entertain the reader.
  - **Content**—what information is to be communicated?
  - **Character**—what mood is to be created?
  - **Form**—how will the message be displayed?
  - **Audience**—who will see the message?
  - **Distribution**—where will this message be seen?
  - **Budget**—how much money can be spent for the project, including printing and distribution costs?
- Select the appropriate type of document.
  - **Brochures**—announce an event or a series of items such as plays at a particular theater, a concert series, or the details of a specific vacation or city.
  - **Newsletters**—contain multi-columns and information vital to an organization, company, or group.
  - **One-page flyers**—convey one message in just a few words and are designed for mass distribution such as at a meeting, concert, or sporting event.
  - **Presentation graphics**—used in business to translate complex information into easy-to-understand charts and graphs.
- Pleasing balance and emphasis help grab the reader's attention.
  - **Balance**—arranging text and graphics on a page in a pleasing way.
  - **Emphasis**—arrangement of elements on a page to attract the most attention to the most important element.

Creating the page layout

☐ Graphic elements

▲ Typography is the art and technique of working with type elements. Type is one of the strongest graphic elements. The typeface chosen can suggest the tone for the message, whether it is strong, light and airy, or direct and businesslike.

- Fonts are sets of characters for one size and style of type. They can be used to create distinctive visual effects. Using too many font styles or sizes can create distraction rather than attention. The type sizes should emphasize importance of the text.
  - Serif type has short lines extending from the ends of characters. A serif type is usually used for the body of a document because it is easier to read. The serifs tend to link the letters together so they flow.
  - Sans serif type (sans means without) has no lines extending from the end of characters. It is generally used for heads and subheads because it tends to stand out for easier reading in larger type sizes.
- Leading is the distance between lines of type, measured in points from the baseline of one line of type to the baseline of the next line.
- Kerning is the process of reducing white space between certain combinations of type characters to tighten fit and improve appearance.
- Widows and orphans (single lines left at the bottom or on the top of a page) should be controlled so that the text remains together.
- Use of white space is important. Dramatic effects can be created by balancing white space, text, and graphics. There is a fine line between effective use of white space and leaving a hole. Simple ways to use white space in layouts include:
  - Space between lines of type.
  - Space between columns.
  - Space above and below headlines.
  - Space around and inside boxes.
- Use of headers or footers helps the reader distinguish what page, chapter, unit, etc. is being seen. On long documents, such as a business report with presentation graphics, headers or footers can be used for page numbers and for noting what the page includes.

- A balanced and pleasing masthead/nameplate should stand out. Newsletters have the company's masthead/nameplate at the top of the first page. The logo is usually worked into the design.
- Headlines should be balanced and emphasized but should not overpower the masthead/nameplate. Headline type should be consistent so the reading flow is not interrupted.
- Captions or cutlines should accompany most graphics to explain the information shown. Type used should look different in size or style to help the reader distinguish it from body type.
- Other elements can separate and highlight text and graphics.
  - Screen tints are made of fine dot patterns that "tint" an element inside a border or box to offset information from the rest of the text.
  - Drop shadows give dimension to many kinds of graphics. This type of shadowing can be used to focus attention on boxed text or graphics, such as charts, maps, and photographs.

▲ Graphics can convey a message by showing a single picture instead of using a lot of words. Graphics should be used wisely and not clutter a page.

- Scanning can be helpful because original pictures or graphics are difficult to produce.
  - Halftone scanning is the photomechanical reproduction of a black-and-white photograph into a series of fine dots for reproduction or to be imported into a word processing or page layout program.
  - Line drawing is the photomechanical reproduction of a black-and-white photograph into a series of fine lines for reproduction or to be imported into a word processing or page layout program.
- Creation of a specific picture can be performed with a graphic or CAD program. New looks can be created by using a drawing program.
- Use of line-based art includes rules, boxes, and borders.
  - Rules are lines that can be vertical or horizontal, thick or thin depending upon the effect desire.
  - Boxes are used to enclose text or graphics. They can create strong visual effects by offsetting text or graphics that are to be given closer attention.
  - Borders are similar to boxes and can "frame" an item that needs extra emphasis.

        - Clip art, a collection of professionally drawn symbols, letters, and pictures, can be used freely because it is in the public domain. Sets of clip art for many fields are available at nominal costs.
        - Dingbats are small ornamental characters such as bullets, stars, and flowers that are used to decorate a page or create emphasis of a specific item. These dingbats are not found in standard fonts. Dingbats should be used consistently to help the reader. Too many dingbats can cause confusion.

- Steps in laying out a page
    - Sketch proposed layouts. Thumbnail sketches are quickly drawn illustrations of how the design will appear on the page. This type of sketch is generally small and not drawn to scale and should be done before using a page layout program. The first layout may not be the best choice. If several sketches are done, the final choice will be easier to make.
    - Designate number of columns to be used. Columns play a major role in how the layout will look. Brochures have two, three, or sometimes four columns. Newsletters generally have three or four columns.
    - Set margins. Deciding how the document will look is critical before setting the margins. Whether the document will be folded, stapled, or loose will affect the margin settings.
    - Develop rough layouts from the thumbnail sketches. They are drawn to scale and have more detail. Refinements are made during this step.
    - Comprehensive layouts are the completed design ready for printing. They are usually performed using a page layout program.

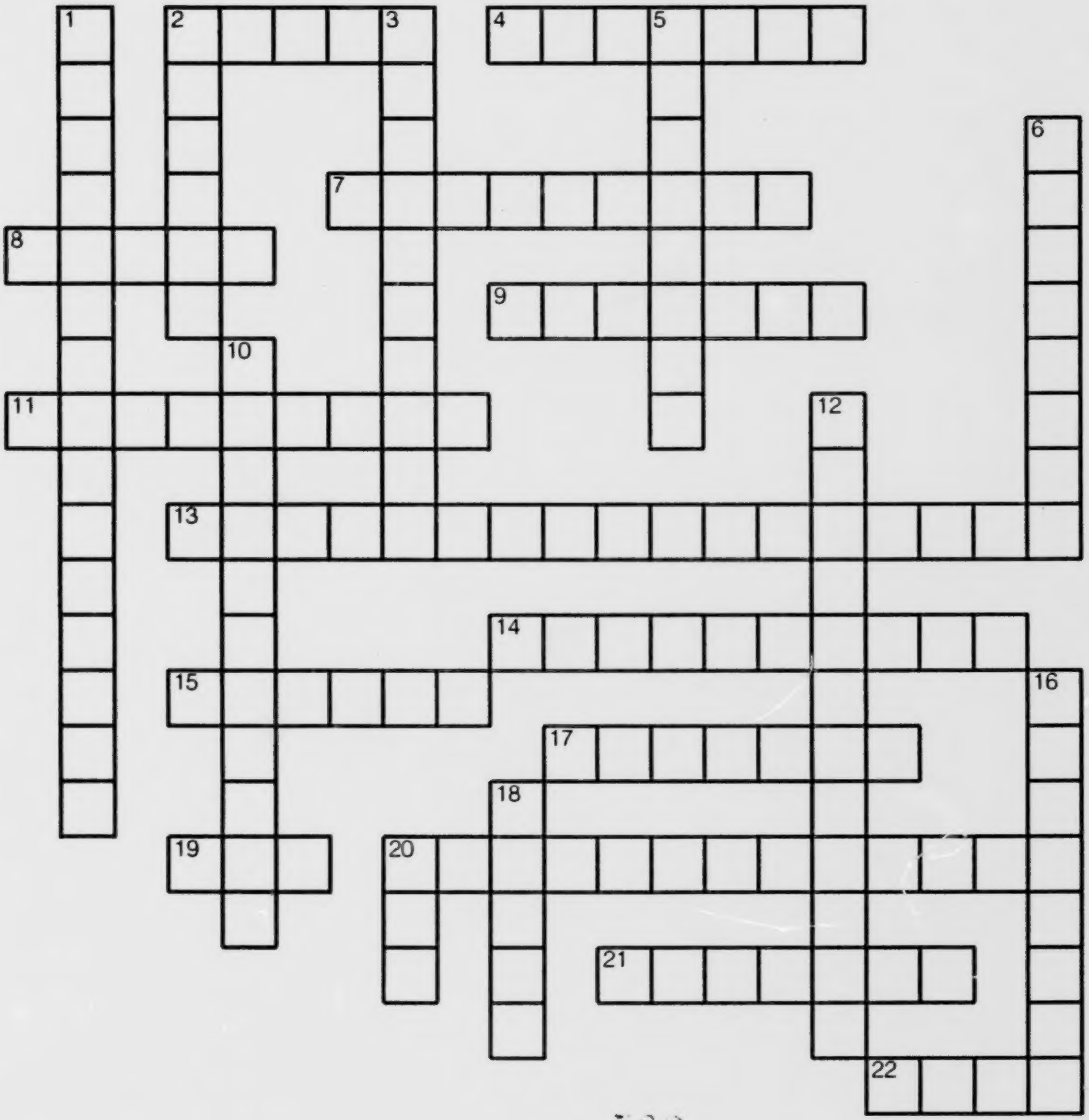
Operational procedures

- Some software manuals give basic information on how to design a publication. Study these lessons before preparing a design. There is no point in running a page layout program until there is a design from which to work.

- A person who does desktop publishing can perform the entire desktop publishing process: layout and design, the creation of text and graphics, and printing.
    - Layout and design
        - Decide what message is to be conveyed and who will be the audience.
        - Be sure to select the type of document that will best convey the message.

- ▲ Text creation
    - Measurements are displayed in picas, points, inches, or centimeters on the ruler to give the user a choice of typesetting measurements.
    - Entering and editing text is generally done in a word processing program and then imported into the page layout program.
    - Formatting the document includes setting margins, line spacing, tabs, etc.
    - A variety of typesizes and styles can be used, but be careful. Excessive use of different typefaces can give the "ransom note" look.
    - Kerning and leading can be set.
    - Style sheets can be used to save repetitious work. Commonly used layout formats can be stored on disk and reused and altered as needed. They are like templates, in that layout information can be stored without the text or graphics. Many programs include a number of predesigned style sheets.
    - Indices and tables of contents can be created.
- ▲ Graphic image manipulation
    - Graphic images such as borders, lines, arrows, and dingbats can be generated.
    - Graphics can be expanded or shrunk.
    - Images can be edited and altered.
    - Scanned images can be imported.
    - Images from paint and draw programs can be imported.
- ▲ Printing
    - Completed documents can be printed on a laser printer.
    - Photocopies can be made.
    - If numerous copies are needed, the camera-ready copy can go to the printer.

ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE



ACTIVITY 1: TERMINOLOGY CROSSWORD PUZZLE CLUES

ACROSS

2. Complete assortment of typefaces and sizes.

4. Arranging text and graphics on a page in a pleasing way.

7. Function that determines position of type.

8. The form taken by the cursor when it is in the work area of a publication.

9. Markers on a frame or graphic line that must be accessed before moving or changing that element.

11. A method used by laser printers that produces individual letters by forming a pattern of pixels.

13. Utilizing a personal computer, appropriate software, and an output device to combine text and graphics to produce a document.

14. A layout drawn to actual size with the fine points not included.

15. Containers that hold the various elements of art and text in a document.

17. A collection of professionally drawn symbols, letters, and pictures which can be used freely because it is in the public domain.

19. A computer programming language whose vocabulary can express the description and placement of text and graphic elements on a page.

20. The layout in final camera-ready copy.

21. Small black dots or other characters used to call attention to a portion of text.

22. Relating the style of type to the message.

DOWN

1. The beginning ideas of layouts drawn on a small scale to aid in selection of best arrangement.

2. The size, shape, form, proportions, margins, and overall design of a printed item.

3. Layouts that can be saved on disk for use with any document.

5. The part of a lowercase letter above the height of a lowercase x, such as the upper parts of h or d.

6. Cutting off parts of an image or drawing to make it fit or show only selected areas.

10. Final copy of text and illustrations ready for reproduction.

12. A printer that produces a high degree of resolution by using a laser beam.

16. The line of writing on which the main part of the letter rests.

18. A copy of a photograph or scanned document that is digitized and stored in memory or on disk.

20. Refers to software necessary to do drawings or designs on a computer.

ACTIVITY 2: DESKTOP PUBLISHING COMPONENTS

Project 1

Accumulate information, pictures, catalog descriptions, and prices concerning the components required to perform desktop publishing activities. Place all information into a notebook and organize the information into sections.

Project 2

Using the information you located in *Project 1*, select all the components you would purchase if you could put together a desktop publishing system. Create a brief memo that includes all the components you selected and list the prices.

5-2 Desktop Publishing

Activities

ACTIVITY 3: TECHNIQUES FOR PRODUCING LAYOUTS

Project 1

Create a thumbnail sketch of a flyer for a local organization that will be having an event soon.

Project 2

Using the thumbnail sketch created in *Project 1*, create a rough draft of your flyer.

Project 3

Using the rough draft created in *Project 2*, create the comprehensive layout.

ACTIVITY 4: DESKTOP PUBLISHING DOCUMENT STYLES

Project 1

Prepare your resume in three formats and print a copy of each format. Save all three files in separate ASCII (or TEXT) files so that the documents can be imported into another word processing or page layout program at a later time. Place your resumes into a portfolio folder.

Project 2

Create a letterhead for the company you created in the *Competency Test* for *Section 1, Unit 2.* Print a copy.

Project 3

Create a graphic for envelopes to go with your letterhead for the company. Print a copy.

Project 4

Create business cards for yourself as an employee of the company. Carry through the letterhead and envelope design onto the business card. Print a copy.

SECTION 6

Closure

This section is designed to provide a closure to the course Business Information Processing. It reviews course objectives in relation to student competencies. Suggestions for making course and student evaluations are included.

Closure of Business Information Processing 6-1

Lesson Plan

Allocated Time: 5 Hours

Unit Objective: Students will be able to analyze, evaluate, and demonstrate proficiency in course content.

Student Competencies: After completing this unit, the student will be able to:

1. Relate the objectives of the course Business Information Processing to personal success in the business environment.
2. Analyze section and unit contents in relation to the course objectives.
3. Recognize levels of competency performance.
4. Assess the course in terms of objectives and content.
5. Complete a course examination with a score of 70% or better accuracy.

Focus: An important component of the learning process is closure. Closure can be a review, a summation, or a conclusion. Its purpose is to see how the parts make up or contribute to the whole. A final question needs to be answered: "Has the course accomplished its primary objective?"

6-1 Closure of Business Information Processing

Content Outline

Review of course objectives by sections and units

Review of sections and units
Introduction to business information processing
Word processing
Business communications
Information management tools
Information processing tools
Closure

Analysis of student competencies

Course evaluation

Examination

Closure of Business Information Processing 6-1

Teacher Activities

Teacher Preparation

- ☐ Preview unit.
- ☐ Review unit objectives.
- ☐ Make instructional analysis.
- ☐ Assess student learning needs.
- ☐ Decide on lesson domain: cognitive, psychomotor, or affective.
- ☐ Select instructional materials based on instructional analysis and student learning needs.
- ☐ Select instructional strategies based on lesson content and student learning needs.
- ☐ Prepare lesson plans from the unit lesson.
- ☐ Prepare additional instructional material.
- ☐ Reserve necessary media and equipment.

Teacher Presentation

- ☐ Present student objectives.
- ☐ Establish rapport with students.
- ☐ Review lesson objectives with students.
- ☐ Relate lesson to prior or future learning.
- ☐ When appropriate, encourage student interaction through questioning, discussions, or some other strategy.
- ☐ Emphasize the value/importance of the unit or activity.
- ☐ Allow time for closure of a lesson.

Reteach Activities

- ☐ Identify area(s) of weakness from results of evaluation.
- ☐ Select unit activities not previously used.
- ☐ Use additional resources and/or create materials based on student learning needs.
- ☐ Use a different teaching strategy in reteaching.
- ☐ Retest.

Specific Teaching Activities

☐ Design a bulletin board to help students toward a personal summative evaluation of the Microcomputer Applications course. Suggestions are: WHAT I HAVE LEARNED FROM BIP; MY BEST FROM BIP; AFTER BIP, WHAT?

☐ Review overhead transparencies included with Section 1 on course objectives.

☐ Discuss with students the objectives of the course.

☐ Divide students into groups. Assign to each group a section to be reviewed and presented to the class. The reviews might include competencies developed, synopsis of units, importance of units. Have the other students take notes during the presentations.

☐ Hand out the listing of competencies to the class. Have each student rate what he/she considers to be his/her level of performance for each competency.

Suggested levels of performance might include: MIN (minimum), 1; F (fair), 2; A (average), 3; or M (mastery), 4. The instructor will need to determine what criteria constitute the levels. Collect these sheets and tally the information for each of the competencies. Use this information when planning for the next year. (For example, results might suggest you make revisions in your teaching style, presentation, etc., if a majority of the students feel they have achieved only a minimal mastery.)

☐ Have students develop review questions for the examination. Provide the students with the procedures for keying in the questions. Make copies of each group of questions and answers for the remaining class members. Review these with the students. Inform the students that you will be adding some questions of your own. Provide the students with examples. Give the examination from these questions.

☐ Give examples of the type of psychomotor skills you will be testing.

☐ Assign time for students to review for their examination. Be sure they have the correct answers to the questions and/or activities.

☐ If you have not used the simulations, now would be a good time to use them. If you have used some of the simulations, consider using the others in this closure.

SECTION 6

Closure

Unit 1: Closure of Business Information Processing

Unit Objective: Students will be able to analyze, evaluate, and demonstrate proficiency in course content.

Student Competencies: After completing this unit, the student will be able to:

1. Relate the objectives of the course Business Information Processing to personal success in the business environment.
2. Analyze section and unit contents in relation to the course objectives.
3. Recognize levels of competency performance.
4. Assess the course in terms of objectives and content.
5. Complete a course examination with a score of 70% or better accuracy.

Focus: An important component of the learning process is closure. Closure can be a review, a summation, or a conclusion. Its purpose is to see how the parts make up or contribute to the whole. A final question needs to be answered: "Has the course accomplished its primary objective?"

Closure of Business Information Processing 6-1

Unit Overview

Review of course objectives by sections and units

☐ Introduction to Business Information Processing

- ▲ Introduction to the course
- ▲ Social implications
    - Define terminology related to computer crime, computer users, and new computer devices and techniques.
    - Identify the major issues and technological developments related to computers and society.
    - Describe ethical and legal issues that have arisen as a result of the computer revolution.
    - Identify privacy issues involved with electronic data storage.
    - Explain reasons for concern about the reliability of computer systems.

☐ Word processing

- ▲ Word processing procedures
    - Identify terminology related to word processing.
    - Determine the meaning of word processing, its components, its diversity, and how it relates to the information processing cycle.
    - Discuss and demonstrate use of common word processing functions.
    - Create, spell check, use formatting options, and save documents.
- ▲ Document production procedures
    - Demonstrate the proper use of the document production cycle.
    - Identify basic parts and formats of business documents.
    - Apply proofreading skills to create mailable business documents.
    - Demonstrate the ability to perform a mail merge.

- ☐ Business communications
  - ▲ Writing techniques
    - Identify and use business English terminology.
    - Demonstrate correct usage of the parts of speech, subject-verb agreement, expression of numbers and abbreviations, and sentence construction.
    - Apply correct punctuation, capitalization, and spelling rules.
    - Compose well-written business letters and documents.
  - ▲ Telephone techniques
    - Identify traditional telephone terminology.
    - Describe telephone equipment and systems.
    - Discuss special telephone features and services.
    - Demonstrate characteristics of good listening skills.
    - Apply good telephone pronunciation and articulation techniques.
    - Demonstrate positive techniques of handling incoming and placing outgoing telephone calls.
  - ▲ Transcription techniques
    - Identify and discuss transcription media and equipment features.
    - Demonstrate efficient transcription techniques.
    - Demonstrate the ability to transcribe mailable business documents from dictated tapes.
- ☐ Information management tools
  - ▲ Records control
    - Define terminology used in records management.
    - Demonstrate proper filing procedures.
    - Discuss micrographics and how it is used in records management.
    - Identify steps in transfer of files.
    - Demonstrate the ability to control manual records.

- ▲ Database
    - Define terminology related to database management.
    - Demonstrate proper procedures to create, enter, store, and retrieve information from a database.
    - Print reports and information from the database.
    - Demonstrate the ability to export information from the database software and import the data into a word processing document.
- ▲ Spreadsheets
    - Define the terminology related to spreadsheets.
    - Discuss spreadsheet applications used in business.
    - Demonstrate concepts for processing alphanumeric data.
    - Apply software capabilities to solve problems using a pre-designed template.
    - Print reports and graphs.
    - Export data from the spreadsheet software and import the data into a word processing document.

- ☐ Information processing tools
    - ▲ Telecommunications
        - Define terminology related to telecommunications and networks.
        - Identify equipment needed for telecommunications.
        - Discuss and apply procedures for communicating with electronic bulletin boards, on-line information services, electronic mail, voice mail, and facsimile transmissions.
        - Discuss equipment requirements for network configurations.
    - ▲ Desktop publishing
        - Identify and use desktop publishing terminology.
        - Discuss components required for layout and design of desktop publishing products.
        - Demonstrate proper techniques for producing a publication using a thumbnail sketch, rough draft, and comprehensive layout.

- Apply procedures for preparing text in word processing software and then importing the information into page layout software to insert appropriate graphics.

☐ Closure

- ▲ Course closure

Analysis of student competencies

Course evaluation

Examination

ACTIVITIES 1-2: PERSONAL SUCCESS IN RELATION TO OBJECTIVES

Break into groups designated by your instructor. Your group has been assigned a specific section from *Business Information Processing*. After reviewing the units within the section, make an oral report to your class, having each member of the group give a presentation.

For each unit, report:

A. Section and unit titles.

B. Major objective(s).

C. Synopsis of units.

D. Importance of the unit relative to one's personal success and the business environment.

6-1 Closure of Business Information Processing

Activities

ACTIVITY 3: RECOGNIZING LEVELS OF PERFORMANCE

From the list of the Business Information Processing course competencies on the next page, rate your personal achievement for each of the competencies.

Circle a 4 if ... you have **mastered** the competency.

Circle a 3 if ... you have an **average mastery** of the competency.

Circle a 2 if ... you have a **fair mastery** of the competency.

Circle a 1 if ... you have only a **minimal mastery** or if you have not had the opportunity to master the competency.

Business Information Processing Competency Performance Evaluation

(4 = Mastery—1 = Non-Mastery)

COMPETENCIES

I. Introduction to Business Information Processing

I. Introduction to the Course

NONE

II. Contemporary Office Systems

4 3 2 1 1. Define terminology related to information processing in the contemporary office.

4 3 2 1 2. Describe the organization of the office environment and the responsibilities required.

4 3 2 1 3. Discuss the information processing cycle.

4 3 2 1 4. Discuss hardware used in business.

4 3 2 1 5. Describe software used in business.

4 3 2 1 6. Identify emerging technology that impacts business information processing by using current literature.

III. Social Implications

4 3 2 1 1. Define terminology related to computer crime, computer users, and new computer devices and techniques.

4 3 2 1 2. Identify major issues and technological developments related to computers and society.

4 3 2 1 3. Describe ethical and legal issues that have arisen as a result of the computer revolution.

4 3 2 1 4. Identify privacy issues involved with electronic data storage.

4 3 2 1 5. Explain reasons for concern about the reliability of computer systems.

II. Word Processing

I. Word Processing Procedures

4 3 2 1 1. Identify terminology related to word processing.

4 3 2 1 2. Determine the meaning of word processing, its components, its diversity, and how it relates to the information processing cycle.

4 3 2 1 3. Discuss and demonstrate use of common word processing functions.

4 3 2 1 4. Create, spell check, use formatting options, and save documents.

COMPETENCIES

II. Document Production Procedures

4 3 2 1 1. Demonstrate the proper use of the document production cycle.

4 3 2 1 2. Identify basic parts and formats of business documents.

4 3 2 1 3. Apply proofreading skills to create mailable business documents.

4 3 2 1 4. Demonstrate the ability to perform a mail merge.

III. Business Communications

I. Writing Techniques

4 3 2 1 1. Identify and use business English terminology.

4 3 2 1 2. Demonstrate correct usage of the parts of speech, subject-verb agreement, expression of numbers and abbreviations, and sentence construction.

4 3 2 1 3. Apply correct punctuation, capitalization, and spelling rules.

4 3 2 1 4. Compose well-written business letters and documents.

II. Telephone Techniques

4 3 2 1 1. Identify traditional telephone terminology.

4 3 2 1 2. Describe telephone equipment and systems.

4 3 2 1 3. Discuss special telephone features and services.

4 3 2 1 4. Demonstrate characteristics of good listening skills.

4 3 2 1 5. Apply good telephone pronunciation and articulation techniques.

4 3 2 1 6. Demonstrate positive techniques of handling incoming and placing outgoing telephone calls.

COMPETENCIES

III. Transcription Techniques

4 3 2 1 1. Identify and discuss transcription media and equipment features.

4 3 2 1 2. Demonstrate efficient transcription techniques.

4 3 2 1 3. Demonstrate the ability to transcribe mailable business documents from dictated tapes.

IV. Information Management Tools
I. Records Management

4 3 2 1 1. Define terminology used in records management.

4 3 2 1 2. Demonstrate proper filing procedures.

4 3 2 1 3. Discuss micrographics and how it is used in records management.

4 3 2 1 4. Identify steps in transfer of files.

4 3 2 1 5. Demonstrate the ability to control manual records.

II. Database Management

4 3 2 1 1. Define terminology related to database management.

4 3 2 1 2. Demonstrate proper procedures to create, enter, store, and retrieve information from a database.

4 3 2 1 3. Print reports and information from the database.

4 3 2 1 4. Demonstrate the ability to export information from the database software and import the data into a word processing document.

III. Spreadsheets

4 3 2 1 1. Define the terminology related to spreadsheets.

4 3 2 1 2. Discuss spreadsheet applications used in business.

4 3 2 1 3. Demonstrate concepts for processing alphanumeric data.

4 3 2 1 4. Apply software capabilities to solve problems using a pre-designed template.

4 3 2 1 5. Print reports and graphs.

4 3 2 1 6. Export data from the spreadsheet software and import the data into a word processing document.

COMPETENCIES

V. Information Processing Tools
I. Telecommunications

4 3 2 1 1. Define terminology related to telecommunications and networks.

4 3 2 1 2. Identify equipment needed for telecommunications.

4 3 2 1 3. Discuss and apply procedures for communicating with electronic bulletin boards, on-line information services, electronic mail, voice mail, and facsimile transmissions.

4 3 2 1 4. Discuss equipment requirements for network configurations.

II. Desktop Publishing

4 3 2 1 1. Identify and use desktop publishing terminology.

4 3 2 1 2. Discuss components required for layout and design of desktop publishing products.

4 3 2 1 3. Demonstrate proper techniques for producing a publication using a thumbnail sketch, rough draft, and comprehensive layout.

4 3 2 1 4. Apply procedures for preparing text in word processing software and then importing the information into page layout software to insert appropriate graphics.

VI. Closure

NONE

ACTIVITY 4: ASSESSING THE OBJECTIVES AND COURSE CONTENT

Working in the same group and section and units as in *Activity 1*, assign each member of the group a specific portion of a section. Have each group member prepare seven questions with answers which could be used for an examination. As part of the seven questions, include two that relate to skill development. Key in the questions following the instructions provided by your instructor. They will be printed out and copied for your classmates.

APPENDIX A

Reference Addresses

PUBLISHERS

Addison-Wesley Publishing Co., Inc.
Reading, MA 01867

Allyn & Bacon
Div. of Simon & Schuster
160 Gould Street
Needham Heights, MA 02194

American Association for Vocational Instructional Materials
745 Gaines Road
Athens, GA 30605

American Bankers Assn.
1120 Connecticut Ave. NW
Washington, DC 20036

AVA Resources
2020 N. 14th Street
Arlington, VA 22201

Bantam Books
Div. of Bantam Doubleday Dell Publishing
666 Fifth Avenue
New York, NY 10103

Brooks/Cole Publishing Co.
Div. of Wadsworth
511 Forest Lodge Road
Pacific Grove, CA 93950

William C. Brown Group
2460 Kerper Blvd.
Dubuque, IA 52001

Career Aids, Inc.
0417 Nordhoff Street
Dept. K 65
Chatsworth, CA 91311

The Career Press
Box 34, 180 Fifth Avenue
Hawthorne, NJ 07507

Career Publishing
Box 5486
Orange, CA 92613-5486

Chilton Book Company
201 King of Prussia Road.
Radnor, PA 19089-2030

Chronicle Guidance Pub., Inc
66 Aurora Street
Moravia, NY 13118-1190

Curriculum Publications Clearinghouse
46 Horrbin Hall
Macomb, IL 61455

Datapro
1805 Underwood Blvd.
Delran, NJ 08075

Delmar Publishing Inc.
2 Computer Drive West
Box 15-015
Albany, NY 12212

Educational Filmstrips
1405 19th Street
Huntsville, TX 77340

Eric Clearinghouse
Indiana University
Smith Research Center, Ste 150
2805 SE Tenth Street
Bloomington, IN 47408-2698

Glencoe Publishing Co.
Div. of Macmillan/McGraw Hill
School Publishing
936 Eastwind Drive
Westerville, OH 43081

Harper Collins Publisher
10 East 53rd Street
New York, NY 10022

Harcourt Brace Jovanovich, Inc.
6277 Sea Harbor Drive
Orlando, FL 32887

Hemphill
1400 Wather
Austin, TX 78703

Houghton-Mifflin Co.
One Beacon Street
Boston, MA 02107

IEEE Computer Society Press
10662 Los Vaqueros Circle
Los Alamitos, CA 90720

Irwin Publishing Co.
Div. of Times Mirror
1818 Ridge Road
Homewood, IL 60430

MPC Educational Publishers
839 White Plains Road
Bronx, NY 10467

Macmillan/McGraw Hill Publishers
One Conway Park
100 Northfield Drive
Lake Forest, IL 60045

Media Systems, Inc.
757 Third Avenue
New York, NY 10017

Charles E. Merrill Publishing Co.
Div. of Macmillan
445 Hutchinson Avenue
Columbus, OH 43235

Milliken Publishing Co.
1100 Research Blvd.
St. Louis, MO 63132

National Occupational Co. Testing Institute
318 Johnson Hall
Ferris State College
Big Rapids, MI

National Textbook Co.
4255 West Touhy Avenue
Lincolnwood, IL 60646-1975

Ohio State University
Vocational Instructional
Materials Laboratory
154 W. Twelfth Avenue
Columbus, OH 43210-1302

Osborne McGraw Hill
Div. of McGraw Hill Inc.
2600 Tenth Street
Berkley, CA 94710

Paradigm Publishing Intl.
7500 Flying Cloud Drive, Ste 655
Eden Prairie, MN 55344

Prentice-Hall Press
Div. of Simon Schuster
15 Columbus Circle
New York, NY 10023

Radio Shack Education Division
1400 One Tandy Center
Ft. Worth, TX 76102-2805

Simon and Schuster
Div. of Paramont
Communications
1230 Avenue of the Americas
New York, NY 10020

Southwestern Publishing Co.
5101 Madison Road
Cincinnati, OH 45227

Tab Books
Div. of McGraw Hill
113311 Monterry Avenue
Summit, PA 17214

Teaching Aids Inc.
P.O. Box 1798
Costa Mesa, CA 92628-0798

Votech-Oklahoma State Dept. of Vocational and Technical Education
1515 West Sixth Avenue
Stillwater, OK 74074

V TECS
Commission on Education Institutions
Southern Assn. of Colleges and Schools
795 Peachtree Street
N.E. Atlanta, GA 30365

Wadsworth Publishing
Div. of Thompson Corp.
10 Davis Drive
Belmont, CA 94002

West Publishing
50 Kellogg Blvd.
St. Paul, MN 55164

Western Tape
2761 Marine Way
Mountain View, CA 94040

J. Weston Walch, Publishing
321 Valley Street
P.O. Box 658
Portland, ME 04104-0658

John Wiley and Sons, Inc.
605 Third Avenue
New York, NY 10158

SOFTWARE VENDORS

Abbot Educational Software
334 Westwood Avenue
East Longmeadow, MA 01028
(413)525-3462

Academic Software
22 E. Quackenbush Avenue
Durmont, NJ 07628

Acorn Software Products
34 North Carolina Avenue, S.E.
Washington, D.C. 20003
(202)544-4259

Activision, Inc.
P.O. Box 7287
Mountain View, CA 94030

Addison-Wesley
2725 Sand Hill Road
Menlo Park, CA 94025

Addison-Wesley Publishing Co.
Business & Professional Division
Reading, MA 01867
(617)944-3700

Advanced Systems, Inc.
2340 S. Arlington Heights Rosd
Arlington Heights, IL 60005
(312)981-4260

Aldus
411 First Avenue, SO.
Suite 200
Seattle, WA 98136

Alternate Source
1806 Ada Street
Lansing, MI 48910
(517)487-3358

Apple Computer Company
10260 Bandley Drive
Cupertino, CA 95014
(408)996-1010

Applied Educational Systems
RFD #2, Box 213
Dunbarton, NH 03301
(603)774-6151

Applied Engineering
P.O. Box 798
Carrollton, TX 75006

Applied Microsystems
P.O. Box 832
Roswell, GA 30077

Applied Software Technology
14125 Capii Drive
Los Gatos, CA 95030

Aurora Systems
2040 East Washington Avenue
Madison, WI 53704
(608)249-5875

B & B Software
P.O. Box 2090
Ann Arbor, MI 48106
(313)668-8152

Bell & Howell Micro Systems
Audio Visual Products Division
7100 North McCormick Road
Chicago, IL 60645
(312)262-1600

Betamax, Inc.
101 Nickerson Street
Suite 550
Seattle, WA 98109
(206)282-6249

Bits & Bytes
Fenner Block, 33 Church Street
Fredonia, NY 14063
(716)673-1515

Borg-Warner Educational Systems
600 West University Drive
Arlington Heights, IL 60004
(800)323-7577

Brinker Computing
2775 Tessmer Rosd
Ann Arbor, MI 48103
(313)662-6386

Broderbund
17 Paul Drive
San Rafael, CA 94903-2101

Business and Agri Services
Route 2, Box 118
Raymond, IL 62560
(217)229-3584

Career Aids
20417 Nordhoff Street, Dept. F5
Chatsworth, CA 91311

Career Publishing Inc.
P.O. Box 5486
Orange, CA 92613-5486

Comprehensive Software
2316 Artesia Blvd
Suite B
Redondo Beach, CA 90278
(213)318-2561

Compuserve
5000 Arlington Center Blvd.
Columbus, OH 43220

Computation
P.O. Box 502
Troy, MI 48099

Compu-Teach
240 Bradley Street
New Haven, CT 06511

The Computer Center
302 Commercial
Waterloo, IA 50701
(319)232-9504

Computer Information Exchange
P.O. Box 159
San Luis Rey, CA 92068
(714)757-4849

Computers Plus Company
2303 N. 44th Street #2
Phoenix, AZ 85008
(602)955-1404

Computrex Computer Services
P.O. Box 536
Inman, SC 29349

Computer House Division
1407 Clinton Road
Jackson, MI 49202
(517)782-2132

Continental Software
12101 Jefferson Blvd.
Culver City, CA 90230
(213)371-5612

Control Data Corporation
P.O. Box 261127
San Diego, CA 92126
(800)233-3784

Cook's Computer Company
1905 Bailey Drive
Marshalltown, IA 50158

Courseware, Inc.
10075 Carroll Canyon Rosd
San Diego, CA 92131
(619)578-1700

Creative Software
230 E. Caribbean Drive
Sunnyvale, CA 94089

Curriculum Applications
P.O. BOX 264
Arlington, MA 02174

Decision Data, Inc.
213 Lincoln Way
Ames, IA 50010
(515)233-4807

Design Software Inc.
Learning Services
61 West Eighth Street
P.O. Box 10636
Eugene, OR 97440-2636

Designware
345 Fourth Street
San Francisco, CA 94107

Dorsette Educational Systems, Inc.
P.O. Box 1226
Norman, OK 73070
(405)288-2300

DRW Educational Systems
P.O. Box 2941
Costa Mesa, CA 92628
(714)548-9754

Educational Activities, Inc.
P.O. Box 392
Freeport, NY 11520
(800)645-3739

Educational Courseware
Ten Bay Street
Design 66
Westport, CT 06880

Educational Microsystems, Inc.
P.O. Box 471
Chester, NJ 07930
(210)879-5982

Educational Programming Systems
1328 Baus Blvd.
St. Louis, MO 63132
(314)991-0300

Educational Programs
P.O. Box 2345
West Lafayette, IN 47906
(317)463-4778

Educational Resources
2360 Hassell Road
Hoffman Estates, IL 60195

Educational Services Management
P.O. Box 12599
Research Triangle Park, NC 27709
(919)781-1500

Educational Software Corp.
414 Rosemere
Maquoketa, IA 52060

Educational Software and Design
P.O. Box 2801
Flagstaff, AZ 86003

EDUTECH
50 Putnam Street
West Newton, MA 02165
(617)965-4813

EDUTEK Corp.
P.O. Box 11354
Palo Alto, CA 94306
(415)325-9965

Educational Testing Services
SIGI Office
Princeton, NJ 08541
(609)734-5165

Edu-ware
P.O. Box 336
Maynard, MA 01754

EMC Publishing
Changing Times Education Services
300 York Avenue
St. Paul, MN 55101

526

EPYX
600 Galveston Drive
Redwood, CA

Generic Software
8763 148th NE
Redmond, WA 98052

Great Plains Computers
113 Broadway
Fargo, ND 58102
(701)293-8483

Harris Laboratories
624 Peach Street, P.O. Box 8037
Lincoln, NE 68501
(402)476-2811

Hartley Courseware, Inc.
P.O.Box 431
Diamondale, MI 48821
(616)942-8987

Harvest Computer Systems
203 West 11th Street
Alexandria, IN 46001
(317)724-9527

Hayden Book Company
50 Essex Street
Rochelle Park, NJ 07662
(800)631-0856

High Technology Software Products, Inc.
P.O. Box 14665
Oklahoma City, OK 73113
(405)840-9900

Horizons Unlimited
5367 Sage
Edwards, CA 93523
(805)258-8412

Houghton-Mifflin
Educational Software Division
P.O. Box 683
Hanover, NH 03755

Individual Software, Inc.
1163-1 Chess Drive
Foster City, CA 94404
(415)341-6116

Instructional Software, Inc.
1278 Massachusetts Avenue
Cambridge, MA 02138
(617)492-0386

International Bureau of Software Testing
536 Wendell, Suite 7
Sunnyvale, CA 94086

International Micro Systems
8425 Quivara Road
Lenexa, KS 66215
(913)888-8330

Interpretive Education
2306 Winters Drive
Kalamazoo, MI 49002
(616)345-8681

Interpretive Education Incorporated
157 S. Kalamazoo Mall
Suite 250
Kalamazoo, MI 49007
(616)345-8681

IQUEST
CompuServe
5000 Arlington Center Blvd.
Columbus, OH 43220

Knoware, Inc.
301 Vassar Street
Cambridge, MA 02139
(617)576-3821

Krell Software
21 Millbrook Drive
Stony Brook, NY 11790
(518)751-5139

Learning Services
61 West Eighth Street
P.O. Box 10636
Eugene, OR 97440-2636

Lotus Development Corp.
55 Cambridge Parkway
Cambridge, MA 02142

Charles Mann & Associates
Microcomputer Division
55722 Santa Fe Trail
Yucca Valley, CA 92284
(714)365-9718

MECC
3490 Lexington Ave. North
Saint Paul, MN 55126-8097

Micro Lab Learning Center
3218 Skokie Valley Road
Highland Park, IL 60035
(312)433-7550

Micro-Comp Incorporated
2015 N.W. Circle Blvd.
Corvallis, OR 97330

Microcomputer Education Applications Network
256 N. Washington Street
Falls Church, VA 22046
(702)536-2310

Microcomputers In Education
4148 Winnetka Avenue, North
Minneapolis, MN 55427
(612)533-2781

Microcomputer Software
Illinois Vocational Curriculum Center
Sangamon State University, E-22
Springfield, IL 62708
(217)786-6375

Microcomputer Software Systems
4716 Lakewood Drive
Metairie, LA 70002

Microsoft
16011 NE 36th Way
P.O. Box 97017
Redmond, WA 98052

Microsoft Consumer Products
400 180th Avenue, N.E.
Bellevere, WA 98004
(206)454-1313

Milliken Publishing Company
1100 Research Blvd.
St. Louis, MO 63132
(314)991-4220

Minnesota Curriculum Services Center
3554 White Bear Avenue
White Bear Lake, MN 55110
(612)770-3943

Mindscape
3444 Dundee Road
Northbrook, IL 60015

Minnesota Educational Computing
Consortium Publications
2520 Broadway Drive
St. Paul, MN 55113
(800)631-8112

Muse Software
347 N. Charles Street
Baltimore, MD 21201
(301)659-7212

NCCD (National Coordinating Center
for Curriculum Development)
State University of New York
Stony Brook, NY 11794
(516)246-8418

National Software Marketing
4701 McKinley Street
Hollywood, FL 33021
(305)625-6062

Norton Computing
2210 Wilshire Blvd. #186
Santa Monica, CA 90403

Nutmeg Systems, Inc.
25 South Avenue
New Canaan, CT 06840

On-Line Systems
36575 Mudge Ranch Road
Coarsegold, CA 93614
(202)683-6858

Optical Data Corp.
66 Hanover Road
Box 97
Florham Park, NJ 07932

Pillsbury Center
Mail Center 3286
200 S. 6th Street
Minneapolis, MN 55402
(612)330-8732

Programs For Learning, Inc.
P.O. Box 954
New Millford, CT 06776

Rainbow Micro Software
1650 Piikea Street
Honolulu, HI 96818
(TRS-80 Programs)

Regency Educational Systems
4951 Airport Parkway
Dallas, TX 75248

Scholastic, Inc.
904 Sylvan Avenue
Englewood Cliffs, NJ 07632

School Microware
P.O. Box 246
Dresden, ME 04342
(207)737-4466

Silicon Express
955 E. Main Street
Columbus, OH 43213

Software Exchange
6 South Street, Box 68
Milford, NH 03055
(603)673-5144

Software Industries
902 Pinecrest
Richardson, TX 75080

Software Publishing Corp.
1901 Landings Drive
Mountain View, CA 94043

Southern Computer Systems, Inc.
P.O. Box 55473
Birmingham, AL 35255

South-western Publishing Company
5101 Madison Road
Cincinnati, OH 45227
(513)271-8811

Springboard Software, Inc.
7808 Creekridge Circle
Minneapolis, MN 55435

John Steffee, Inc.
1030 Buffalo Trail
Tyler, TX 75703

Sterling Swift Publishing Company
7901 South IH-35
Austin, TX 78744
(512)282-6840

Strictly Software
4321 N. 39th Street
Phoenix, AZ 85018
(602)955-8138

Sunburst Communications
39 Washington Avenue
Pleasantville, NY 10570

Teacher's Pet
c/o Glenn Fisher
1517 Holly Street
Berkeley, CA 94703

The Teaching Assistant
22 Seward Drive
Huntington Station, NY 11746

Teaching Tools
P.O. Box 12679
Research Triangle Park, NC 27709
(919)851-2374

Time Share Corp
Hanover, NH 03775
(603)488-3838

Timeworks, Inc.
444 Lake Cook Rosd
Deerfield, IL 60015

Visicorp
2895 Zanker Rosd
San Jose, CA 95134
(408)946-9000

Walt Disney Educational Media Co.
500 S. Buena Vista Street
Burbank, CA 91521

Westinghouse Learning Corp.
5505 West 110th Street
Oak Lawn, IL 60453

J. Weston Walch, Publisher
321 Valley Street, P.O. Box 658
Portland, ME 04104-0658

Whitney Educational Services
2071 Tenth Avenue
San Francisco, CA 94116

WordPerfect
1555 North Technology Way
Orem, UT 84057

MICROCOMPUTER DIRECTORIES

Apple Computer Education Software Directory
Visual Materials, Inc.
4170 Grove Avenue
Gurnee, IL 60031

The Apple Software Directory
WIDL Video
5245 W. Diversey Ave.
Chicago, IL 60639
(312)622-9606

Educational Software Directory
Sterling Swift Publishing Co.
1600 Fortview Road
Austin, TX 78704
Apple software only.

Educators Handbook and Software Directory
Vital Information, Inc.
7899 Mastin Drive
Overland Park, KS 66024

The Software Directory
Software Central
P.O. Box 30424
Lincoln, NE 68503

ELECTRONIC INFORMATION SERVICE

BRS/Search
1200 Route 7
Latham, NY 12110
(800)227-5277

Compuserve Information Service, Inc.
5000 Arlington Center Blvd.
Columbus, OH 43220
(800)848-8990

Datext, Inc.
444 Washington St.
Woburn, MA 01801

Dialog Information Service, Inc.
3460 Hillview Avenue
Palo Alto, CA 94304
(800)334-2564

Dow Jones/Retrieval Service
P.o. Box 300
Princeton, NJ 08540
(609)452-2000

Easynet
Telebase Systems, Inc.
134 North Narberth Avenue
Narberth, PA 19072

General Videotext Corp. (Delphi)
3 Blackstone Street
Cambridge, MA 02139

Infotrac
Information Access Company
11 Davis Drive
Belmont, CA 94002

Newsnet
945 Haverford Road
Bryn Mawr, PA 19010
(800)345-1301

Nexis/Lexis
Mead Data Central
9393 Springboro Pike
P.O. Box 933
Dayton, OH 45401
(800)227-4908

ORBIT Search Service
SDC Information Service
2500 Colorado Avenue
Santa Monica, CA 90406

The Source
1616 Anderson Road
McLean, VA 22102
(800)336-3330

TENET
c/o UT Systems
Office of Telecom Services
Service Building, Room 319
Austin, TX 78712

VUTEXT Information Services, Inc.
1211 Chestnut Street
Philadelphia, PA 19107
(215)665-3300

MAGAZINES/PERIODICALS/NEWSLETTERS/JOURNALS

Administrative Management
1123 Broadway
New York, NY 10010

Aldus Magazine
411First Avenue SO.
Seattle, WA 98104

Apple Orchard
908 George Street
Santa Clara, CA 95050

Appleworks Forum
Box 87453
Carlon, MI 48187

ARMA Qrtly—Records Management Quarterly
Suite 214
4200 Somerset Drive
Prairie Village, KS 66208

Balance Sheet
South-Western Publishing Co.
5101 Madison Road
Cincinnati, OH 45227

Business Computer Digest
4800 Riverbend Road
Boulder, CO 80301

Business Computer News
Moorshead Publications Ltd.
1300 Don Mill Road
Toronto, ONT M3B3M8

Business Computer Systems
Cahners Publishing Company, Inc.
221 Columbus Avenue
Boston, MA 02116

Business Education Film Cat.
c/o Paul Weinberg, Ed.
Box 449
Clarksville, NJ 08510

Business Education Forum
NBEA
1914 Association Drive
Reston, VA 22091

Business Education Guide
Box 2014
Newptune City, NJ 07754

Business Education World
Glencoe/McGraw-Hill
936 Eastwind Drive
Westerville, OH 43081

Business Exchange
Houghton-Mifflin Co.
One Beacon Street
Boston, 02108

Business Week
McGraw-Hill Publications Company
1221 Avenue of the Americas
New York, NY 10020

Byte: The Small Systems Journal
One Phoenix Mill Lane
Peterborough, NH 03458

Classroom Computer Learning
Peter Li, Inc.
2451 East River Rd.
Dayton, OH 45439

Compute!
324 W. Wendover Avenue, Suite 200
Greensboro, NC 26403

Computerist
Softkey Publishing
Box 110816
Tacoma, WA 98411

Computer Virus
Natl. Computer Security Assoc.
4401 A Connecticut Avenue NW
Suite 309
Washington, DC 20008

Computers & Computing Information Resources Directory
Gale Research Inc.
835 Penobocat Bldg.
Detroit, MI 48226

Computerworld
CW Communications, Inc.
Box 880
375 Cochituate Road
Framingham, MA 01701

The Computing Teacher
International Council for Computers in Education
1787 Agate Street
University of Oregon
Eugene, OR 97403

Consumer Reports
Consumers Union of United States, Inc.
256 Washington Street
Mount Vernon, NY 10553

Data Based Advisor
4010 Morena Blvd., Suite 200
San Diego, CA 92117

Data Communications
McGraw-Hill, Inc.
1221 Avenue of the Americas
New York, NY 10020

Data Entry
Data Entry Management Assoc.
101 Merritt
7 Corporate Park
Ft. Norwalk, CT 06032

Datamation
Cahners Publishing Co.
249 West 17th Street
New York, NY 10011

Delta Pi Epsilon Journal
Central Connecticut State Univeristy
Dept. of Management Information Systems
New Britain, CT 06050

Desktop Communication
48 East 43rd Street
New York, NY 10017

DTP
DT Publisher
104 Frame Road
Elkview, WV 25071

Educational Technology
Educational Technology Publications, Inc.
720 Palisade Avenue
Englewood Cliffs, NJ 07632

Electronic Learning
Scholastic Learning, Inc.
730 Broadway
New York, NY 10003

The Ergonomic Newsletter
3029 Wilshire Boulevard, Suite 200
Santa Monica, CA 90403

The Futurist
Publication of The World Future Society
4916 St. Elmo Avenue
Washington, DC 20814

Guide To Free Computer Materials
Educators Progress Service
214 Center Street
Rodish, WI 53956

High Technology
Technology Publishing Company
38 Commercial Wharf
Boston, MA 02110

Home Computer
Emerald Valley Publishing
Box 21910
Eugene, OR 97402

Home Office Computing
Scholastic Inc.
730 Broadway
New York, NY 10003-9538

ICP Software Business Review
International Computer Programs, Inc.
9000 Keystone Crossing
P.O. Box 40946
Indianapolis, IN 46240

IMC Journal
International Information Management Congress
345 Woodcliff Drive
Fairport, NY 14450

Incider
80 Elm Street
Petersborogh, NH 03458

Information Management
Systems Technology Software Media
PTN Publishing Company
101 Crossways Park West
Woodbury, NY 11797

Information Resources Management Journal
Pennsylvania State University at Harrisburg
Middletown, PA 17057

Information Systems News
CMP Publications
111 East Shore Road
Manhasset, NY 11030

Information Systems
Hitchcock Publishing Company
Hitchcock Building
25 West 550 Geneva Road
Wheaton, IL 60188

Infoworld
1060 Marsh Road,
Suite C-200
Menlo Park, CA 94025

Inside Hypercard
Inside Lotus 1-2-3
Inside MS-DOS
Inside MS WORD 5.5
Inside MS WORKS
Inside Windows
Inside Word Perfect
Inside Word for Windows
Cobb Group
Box 35150
Louisville, KY

Journal of Business Communication
Dept. of Management Sciences
Abilene Christian University
Abilene, TX 79699

Journal of Computer Information Systems
College of Administration
Oklahoma State University
Stillwater, OK 74078

Journal of Education for Business
4000 Albermarie Street, NNW
Washington, DC 20016

Journal of Microcomputer System Management
4000 Albermarie Street, NW
Washington, DC 20016

Kilobaud: The Small Computer Magazine
Peterborough, NH 03458

MAC World
PC World Communications, Inc.
555 DeHaro Street
San Francisco, CA 94107

Management World
Administrative Mangement Society
4622 Street Road
Trevose, PA 19047

MIS Information
Box 305
Burbank, CA 91503

Modern Office Technology
Penton/IPC, Inc.
Penton Plaza
1111 Chester Avenue
Cleveland, OH 44114

National Shorthand Reporter
118 Park Street, NE
Vienna, VA 22180

Newsweek
Newsweek, Inc.
444 Madison Avenue
New York, NY 10022

Nibble Express
52 Dominion Drive
Concord, MA 01742

The Office
Office Publications, Inc.
1200 Summer Street
Stamford, CT 06904

Office Administration and Automation
Dalton Communications, Inc.
1123 Broadway
New York, NY 10010

Office Automation
1123 Broadway
New York, NY 10010

Office Guide
Bureau of Business Practices
24 Rope Ferry Road
Waterford, CT 06385-9985

Office Guide for Working Women
Bureau of Business Practices
24 Rope Ferry Road
Waterord, CT 06385-9985

The Office Professional (Newsletter)
1316 Sam Bass Circle
Round Rock, TX 78664

Office Systems
941 Danbury Road
Box 150
Georgetown, CT 06829

Office Talks
Bureau of Business Practices
24 Rope Ferry Road
Waterord, CT 06385-9985

Open Entries
The Center for Studies in Vocational Education
Stone Building
Tallahassee, FL 32306

PC: An Independent Guide To IBM Personal Computers
Ziff-Davis Publishing Company
One Park Avenue
New York, NY 10016

PC Magazine
39 East Hanover Avenue
Morris Plains, NJ 07950

PC Novice
PC Today
120 W. Harvest Drive
Lincoln, NE 68521

PC Week (Weekly Magazine)
Ziff-Davis Publishing Company
800 Boylston Street
Boston, MA 02199

PC World
501 2nd Street, Ste 600
San Francisco, CA 94107

Personal Computing
50 Essex Street
Rochelle Park, NJ 07662

P.S. for Professional Secretaries
Bureau of Business Practices
24 Rope Ferry Road
Wateford, CT 06385-9985

Personal Publishing
191 Gary Avenue
Carol Stream, IL 60188

Popular Science Technology
Times-Mirror Magazines, Inc.
Communications Department
380 Madison Avenue
New York, NY 10017

Research In Word Processing
South Dakota Sch. of Mines and Technology
Rapid City, SD 57701

SAVVY
Savvy Company
111 Eighth Avenue
New York, NY 10011

The Secretary
Professional Secretaries International
P.O. Box 20404
Kansas City, MO 64195

Secretary's Update
133 Richmond Street W.
Toronto, Ont. M5h3M8
Canada

Software Digest
EDP Services, Inc.
7620 Turtle Turnpike
Annadale, VA

Texas Business Educator
Texas Business Education Assn.
3500 Kileen
Amarillo, TX 79109

Today's Office
United Technical Publications, Inc.
645 Stewart Avenue
Garden City, NY 11530

Training & Developmental Journal
American Society for Training and Development
(available by membership only)
600 Maryland Avenue, S.W., Suite 305
Washington, DC 20024

VOCED
2020 N. 14th Street
Arlington, VA 22201

Windows
501 Second Street
San Francisco, CA 94107

WordPerfect
270 West Center Street
Orem, UT 84057

WordPerfect Corporation Report
1555 N. Technology Way
Orem, UT 84057

Working Woman
Hal Publications, Inc.
342 Madison Avenue
New York, NY 10173

SERVICES AND REPORTS

Datapro Reports on Microcomputers
Datapro Research Corporation
1805 Underwood Blvd.
Delran, NJ 08075

Datapro Reports on Microcomputer Management
Datapro Research Corporation
1805 Underwood Blvd.
Delran, NJ 08075

Datapro Reports on Microcomputer Software
Datapro Research Corporation
1805 Underwood Blvd.
Delran, NJ 08075

Datapro Reports on Word Processing
Datapro Research Corporation
1805 Underwood Blvd.
Delran, NJ 08075

The Seybold Report on Office Systems
Seybold Publications, Inc.
Box 644
Media, PA 19063

PROFESSIONAL ORGANIZATIONS

Administrative Management Society
Maryland Road
Willow Grove, PA 19090
(215)659-4300

American Federation of Information Processing Societies, Inc.
1815 North Lynn Street
Arlington, VA 22209

American Management Association
135 West 50 Street
New York, NY 10020
(212)586-8100

American Society for Information Science
1155 16th Street, N.W.
Washington, D.C. 20036
(202)659-3644

American Society for Training and Development
P.O. Box 5307
Madison, WI 53705

American Vocational Association
2020 North 14 Street
Arlington, VA 22201
(703)522-6121

Association for Computer Users (ACU)
1133 Avenue of the Americas
New York, NY 10036
(212)265-6309

Association For Educational Communications and Technology (AECT)
1126 16th Street, N.W.
Washington, D.C. 20036
(202) 833-4180

Association for Educational Data Systems (AEDS)
1201 16th Street, N.W.
Washington, D.C. 20036
(202)833-4100

Association of Information Systems Professionals
1015 North York Road
Willow Grove, PA 19090
(215)657-6300

Association of Records Managers and Administrators
4200 Somerset, Suite 215
Prairie Village, KS 66208
(913)341-3808

Computer-Based Education Research Laboratory
University of Illinois
Urbana, IL 61801

Council for Educational Development and Research
1518 K Street, N.W.
Suite 206
Washington, D.C.

International Council for Computers in Education (ICCE)
Department of Computer and
Information Science
University of Oregon
1787 Agate Street
Eugene, OR 97403
(503)686-4408

Microcomputer Education Applications Network
256 North Washington Street
Falls Church, VA 22046

Minnesota Educational Computing Consortium (MECC)
2520 Broadway Drive
St. Paul, MN 55113
(612)376-1101

National Business Education Association
1914 Association Drive
Reston, VA 22091
(703)860-8300

National Education Association
1201 16th Street, N.W.
Washington, D.C. 20036

Nine to Five National Association of Working Women
1224 Huron Road
Cleveland, OH 44115
(216)566-9308

Office Technology Management Association
9401 West Beloit Road, Suite 101
Milwaukee, WI 53227
(414)321-0880

Professional Secretaries International
Kansas City, MO 64111
(816)531-7010

Texas Business Education Association
Bette Carpenter, Executive Secretary
3500 Kileen
Amarillo, TX 79109

Texas Computer Education Association
7131 Midbury
Dallas, TX 75230
(214)361-9472

VOETAT
Pat King
Edison High School
701 Santa Monica
San Antonio, TX 78212

APPENDIX B

Business Information Processing Competency Checklist

(4 = Mastery—1 = Non-Mastery)

COMPETENCIES

I. Introduction to Business Information Processing

I. Introduction to the Course

NONE

II. Contemporary Office Systems

4 3 2 1 1. Define terminology related to information processing in the contemporary office.
4 3 2 1 2. Describe the organization of the office environment and the responsibilities required.
4 3 2 1 3. Discuss the information processing cycle.
4 3 2 1 4. Discuss hardware used in business.
4 3 2 1 5. Describe software used in business.
4 3 2 1 6. Identify emerging technology that impacts business information processing by using current literature.

III. Social Implications

4 3 2 1 1. Define terminology related to computer crime, computer users, and new computer devices and techniques.
4 3 2 1 2. Identify major issues and technological developments related to computers and society.
4 3 2 1 3. Describe ethical and legal issues that have arisen as a result of the computer revolution.
4 3 2 1 4. Identify privacy issues involved with electronic data storage.
4 3 2 1 5. Explain reasons for concern about the reliability of computer systems.

II. Word Processing

I. Word Processing Procedures

4 3 2 1 1. Identify terminology related to word processing.
4 3 2 1 2. Determine the meaning of word processing, its components, its diversity, and how it relates to the information processing cycle.
4 3 2 1 3. Discuss and demonstrate use of common word processing functions.
4 3 2 1 4. Create, spell check, use formatting op-

COMPETENCIES

II. Document Production Procedures

4 3 2 1 1. Demonstrate the proper use of the document production cycle.
4 3 2 1 2. Identify basic parts and formats of business documents.
4 3 2 1 3. Apply proofreading skills to create mailable business documents.
4 3 2 1 4. Demonstrate the ability to perform a mail merge.

III. Business Communications

I. Writing Techniques

4 3 2 1 1. Identify and use business English terminology.
4 3 2 1 2. Demonstrate correct usage of the parts of speech, subject-verb agreement, expression of numbers and abbreviations, and sentence construction.
4 3 2 1 3. Apply correct punctuation, capitalization, and spelling rules.
4 3 2 1 4. Compose well-written business letters and documents.

II. Telephone Techniques

4 3 2 1 1. Identify traditional telephone terminology.
4 3 2 1 2. Describe telephone equipment and systems.
4 3 2 1 3. Discuss special telephone features and services.
4 3 2 1 4. Demonstrate characteristics of good listening skills.
4 3 2 1 5. Apply good telephone pronunciation and articulation techniques.
4 3 2 1 6. Demonstrate positive techniques of handling incoming and placing outgoing telephone calls.

COMPETENCIES

III. Transcription Techniques

4 3 2 1 1. Identify and discuss transcription media and equipment features.

4 3 2 1 2. Demonstrate efficient transcription techniques.

4 3 2 1 3. Demonstrate the ability to transcribe mailable business documents from dictated tapes.

IV. Information Management Tools

I. Records Management

4 3 2 1 1. Define terminology used in records management.

4 3 2 1 2. Demonstrate proper filing procedures.

4 3 2 1 3. Discuss micrographics and how it is used in records management.

4 3 2 1 4. Identify steps in transfer of files.

4 3 2 1 5. Demonstrate the ability to control manual records.

II. Database Management

4 3 2 1 1. Define terminology related to database management.

4 3 2 1 2. Demonstrate proper procedures to create, enter, store, and retrieve information from a database.

4 3 2 1 3. Print reports and information from the database.

4 3 2 1 4. Demonstrate the ability to export information from the database software and import the data into a word processing document.

III. Spreadsheets

4 3 2 1 1. Define the terminology related to spreadsheets.

4 3 2 1 2. Discuss spreadsheet applications used in business.

4 3 2 1 3. Demonstrate concepts for processing alphanumeric data.

4 3 2 1 4. Apply software capabilities to solve problems using a pre-designed template.

4 3 2 1 5. Print reports and graphs.

4 3 2 1 6. Export data from the spreadsheet software and import the data into a word processing document.

COMPETENCIES

V. Information Processing Tools

I. Telecommunications

4 3 2 1 1. Define terminology related to telecommunications and networks.

4 3 2 1 2. Identify equipment needed for telecommunications.

4 3 2 1 3. Discuss and apply procedures for communicating with electronic bulletin boards, on-line information services, electronic mail, voice mail, and facsimile transmissions.

4 3 2 1 4. Discuss equipment requirements for network configurations.

II. Desktop Publishing

4 3 2 1 1. Identify and use desktop publishing terminology.

4 3 2 1 2. Discuss components required for layout and design of desktop publishing products.

4 3 2 1 3. Demonstrate proper techniques for producing a publication using a thumbnail sketch, rough draft, and comprehensive layout.

4 3 2 1 4. Apply procedures for preparing text in word processing software and then importing the information into page layout software to insert appropriate graphics.

VI. Closure

NONE

APPENDIX C
Equipment

SUGGESTED MINIMUM EQUIPMENT REQUIREMENTS for a Quality Office Education program

Equipment and furniture

A computer or a terminal for each student (networked systems/standalone systems)

Macintosh/SE-hard drive 2-4 mg RAM and/or
MS-DOS 386 minimum, 2-4 MEG minimum storage and/or
PS2's 30, or above

- two disk drives, one 5 1/4" and one 3 1/2" on MS-DOS
- hard disk 80 MEG
- enhanced 101 keyboard with keypad
- high resolution monitor with graphics capability
- several expansion slots

A fully equipped teacher's computer station

Monitors

- Color
- High resolution at least EGA
- Swivel/tilt monitor bases

Printers (A combination of the following printers—using one printer to each two computers as a rule of thumb)

- A 24-pin dot matrix printer with near letter quality/high speed modes
- Letter quality printers
- Laser printers (preferably Postscript)

Other computer peripherals and equipment

- Modems
- Scanner
- Automatic switch boxes for switching access to each computer/terminal
- Mouse for each computer or terminal
- At least two modems and access to dedicated phone line
- Extra cables for attaching peripherals
- Electronic calculator, six to ten
- Transcribing machines, six to ten
- Copy machine
- Overhead projector with low heat/good cooling system
- LCD computer panel for data projection

Pull-down movie screen
File cabinets and storage cupboards
Student work stations with adjustable height
Adjustable chairs, preferably rolling

Supplies

Covers and keyboard covers
Diskettes for backups of each software programs for each computer
Computer paper, both laser and regular cut
Ribbons—standard black and colors
Toner for the laser printers and copy machine
Colored diskettes—each class uses a different color.
Computer maintenance kit—including screwdrivers of various sizes, cotton swabs, alcohol, screen wipes, mini vacuum, air vacuum

APPENDIX D

2 + 2 + 2 Articulation

As a result of the changes in office information systems technology, the electronic office requires a work force with many diverse skills and attributes. The traditional job categories and titles of office workers have been replaced with an array of positions supporting office information systems functions and activities.

To train the office personnel required to support these positions, the two-year secondary office education training program or the two-year community college office careers degree program may not provide the extensive training that business and industry require. Most office information systems management positions require four-year college degrees.

In the past, office education programs offered through the high schools and the community colleges have presented duplicated training plans. Students who chose to enroll in community college office careers programs after high school often had to repeat many of the same competencies that they mastered in their high school vocational programs. If the students transferred to a four-year university program, many of the courses would not transfer. In most instances, the university program was a duplication of the high school and the community college training programs.

In order to prepare the office information systems work force of the future, high schools, community colleges, and universities must develop coordinated training programs that help students in making a smooth transition from one educational level to another without experiencing delays, duplication of effort, or loss of credit.

A 2 + 2 + 2 articulation program in the area of office information systems was be developed in this six-year project. The program provides a complete six-year training program that begins in grade eleven and joins the two-year Dallas County Community College degree program with the junior and senior years of the four-year University of North Texas Office Technology program. Several other junior and senior colleges and universities in Texas have shown interest in participating in this articulation project.

APPENDIX E

Course Descriptions

Microcomputer Applications* **11673100**
Grades 10-12, ½-1 unit

A cluster course which introduces basic concepts and provides hands-on skills related to microcomputer systems and applications. Special emphasis is placed on basic skills for the following: word processing, database, spreadsheet, telecommunications, desktop publishing, electronic image transfer, networking, integrated software, and social implications of using computers. This course is designed as a foundation course and provides preparation for advancement into the occupationally specific courses.

Office Support Systems **11673000**
Grades 10-12, ½-1 unit

A cluster course which introduces the basic concepts and skills needed for general office positions. Instruction and skill development are provided in keyboarding, filing, financial activities, office machines, and securing and maintaining employment. This course provides entry-level employment skills for the office or for advancement into an occupationally specific course.

Business Financial Applications **11673200**
Grades 10-12, ½-1 unit

A cluster course which introduces the basic concepts and skills necessary for employment in financial institutions. Special emphasis will be placed on banking operations, credit administration, types of loans, legal aspects of banking, and other financial institutions. This course provides entry-level information for working in a financial institution or for advancement into an occupationally specific course.

Business Information Processing* **11672100** (2+2)
Grades 11-12, 1-3 units (each year the course is taught)
Preemployment Laboratory or Cooperative Education

An occupationally specific course which introduces the concepts and skills for producing business documents and correspondence through the use of the document cycle and word processing equipment. Special emphasis is placed on automated management of business records, database management, and electronic spreadsheets. Management of information flow, electronic mail, desktop publishing, electronic bulletin boards, graphics, and on-line information services are also included. The course provides preparation for employment or advanced standing at the postsecondary level.

Office Administrative Systems **11672000** (2+2)
Grades 11-12, 1-3 units
Preemployment Laboratory or Cooperative Education

An occupationally specific course which includes advanced concepts and skills necessary for a general office position through a simulated office environment. Special emphasis is placed on keyboarding, records management, communications, operation of office machines, and the electronic production of business documents. The course prepares the student for office employment or advanced standing at the postsecondary level.

Business Computer Applications I* 1167220 (2+2)

Grades 11-12, 1-3 units ((each year the course is taught)
Preemployment Laboratory or Cooperative Education

An occupationally specific course which introduces the advanced concepts and skills related to computer applications. special emphasis is placed on basic computer operations, word processing, database management, spreadsheet manipulation, telecommunciations, desktop publishing, and other high-level business application software. This course is designed to provide the foundation for more advanced computer applications designated in Business Computer Applications II or advanced standing at the postsecondary level.

Business Computer Applications II* 11672300

Grades 11-12, 1-3 units
Preemployment Laboratory or Cooperative Education

An occupationally specific course which includes advanced concepts and skills related to advanced computer applications. special emphasis is placed on teleprocessing, integrated software systems, computer-generated graphics, algorithmic approaches to problem solving, and introductory programming skills. This course provides preparation for employment in a business computer occupation or advanced standing at the postsecondary level.

Business Computer Programming I* 11672400 (2+2)

Grades 11-12, 1-3 units
Preemployment Laboratory or Cooperative Education

An occupationally specific course which emphasizes concepts and skills related to business computer programming. Special emphasis is placed on programming concepts and languages, programming concepts and languages, programming methodology, skills related to data storage, and an awareness of programming applications for business. This course is designed to lay a foundation for further occupationally specific business programming instruction or advanced standing at the postsecondary level.

Business Computer Programming II* 11672500

Grades 11-12, 1-3 units
Preemployment Laboratory or Cooperative Education

An occupationally specific course which includes advanced concepts and skills related to business computer programming. special emphasis is placed on bringing development efforts to full production status in environments, and on languages commonly used in development of commercial software for business applications. Concepts such as design, maintenance, testing, team development, and user documentation are included. This course prepares students for employment in a computer related occupation or advanced placement at the postsecondary level.

Business Office Services**, CVAE—12670500, VEH—13670500

Grades 9-12, 1-3 units, CVAE
Grades 7-12, 1-3 units, VEH

A course which introduces basic concepts and skills needed for a general office position with concentration on the use of reprographic equipment, keyboarding, filing, and office machines. Special emphasis is placed on remediation in the areas of basic math and English usage, as well as securing and maintaining employment.

Business Office Clerical**, CVAE—12670600, VEH—13670400

Grades 9-12, 1-3 units, CVAE
Grades 7-12, 1-3 units, VEH

A course which introduces basic concepts and skills for a general office position with concentration on the use of keyboarding, filing, office machines, communications, and reprographics. Special emphasis is placed on remediation in the areas of basic math and English usage, as well as securing and maintaining employment.

* Recommended for approval to satisfy the computer science requirement for the advanced high school program.

** Students may enroll each year the course is offered

Speciality Courses

The following specialty courses may be offered:

Current Title	Proposed Titles	
Legal Secretarial	Legal Administrative Systems	11670130
Medical Secretarial	Medical Administrative Systems	11670129
Banking Secretarial	Banking and Financial Systems	11670135
Insurance		11670108
Educational Assistant		11671300

APPENDIX F
Essential Elements

COMMON ESSENTIAL ELEMENTS

75.87 Office Education

(a) **The elements in this subsection are common to office education programs and shall be included in each course at the appropriate level. They are described here to preclude repetition in each course. Every school offering office education shall provide courses which include the following essential elements:**

(1) Leadership concepts and skills. The student shall be provided opportunities to:

(A) demonstrate skills, characteristics, and responsibilities of leaders and effective group members;

(B) demonstrate a knowledge of parliamentary procedure principles;

(C) plan and conduct leadership activities; and

(D) prepare for effective citizenship and for participation in our democratic society.

(2) Concepts and skills related to successful employment and/or postsecondary training. The student shall be provided opportunities to:

(A) identify employment opportunities and preparation requirements in the chosen field;

(B) identify effective methods to secure and terminate employment;

(C) demonstrate effective communication skills both oral and written, and follow through on assigned tasks;

(D) demonstrate dependability and punctuality;

(E) demonstrate productive work habits and attitudes;

(F) understand the importance of taking pride in the quality of work performed;

(G) recognize the dignity in work;

(H) develop skills in planning and organizing work;

(I) apply required methods and sequences when performing tasks;

(J) apply principles of time management and work simplification when performing assigned tasks;

(K) identify ethical practices and responsibilities; and

(L) understand the importance of the application of organizational policies and procedures.

(3) Concepts and skills associated with entrepreneurship. The student shall be provided opportunities to:

(A) identify opportunities for business ownership;

(B) understand the risk and profit motive factor;

(C) understand the elements and advantages of the free enterprise system; and

(D) explain the role of small business in the free enterprise system.

(4) Concepts and skills related to safety and safe working conditions. The student shall be provided opportunities to identify and apply safe working practices to all training situations.

(5) Concepts and skills associated with human relations and personality development. The student shall be provided opportunities to:

(A) understand the importance of maintaining good health and proper appearance for effective job performance;

(B) understand oneself and others;

(C) exercise self-control;

(D) accept and use criticism;

(E) recognize basic human relationships as they relate to business success; and

(F) demonstrate characteristics for successful working relationships.

(6) Concepts and skills related to personal and business management. The student shall be provided opportunities to:

(A) explain how management assists in reaching personal and family goals;

(B) explain the management process;

(C) describe the role of management in controlling stress;

(D) identify and understand personal checking accounts;

(E) identify and understand personal loan application processes;

(F) identify and understand different financial institutions;

(G) identify the role and functions of business management;

(H) understand the lines of authority; and

(I) identify effective supervisory techniques.

OFFICE ADMINISTRATIVE SYSTEMS

75.87

(b) **Office Administrative Systems (1, 2, or 3 units) shall include the following essential elements:**

(1) Concepts and skills related to office administration. The student shall be provided opportunities to:

(A) identify duties and responsibilities common to most offices;

(B) delineate the workflow of an office or system;

(C) relate office operations to the entire business organization;

(D) establish priorities and develop organizational abilities;

(E) interpret and apply information from resource materials; and

(F) identify and apply concepts and skills related to safety and safe working conditions in the office environment.

(2) Concepts and skills related to successful employment and/or postsecondary training. The student shall be provided opportunities to:

(A) identify employment opportunities and preparation requirements in the chosen field; and

(B) identify effective methods to secure, maintain, and terminate employment.

(3) Concepts and skills necessary for effective communications in the office environment. The student shall be provided opportunities to:

(A) identify proper techniques in business telephone usage;

(B) prepare effective communication using the document production cycle;

(C) identify and use proper oral and written language skills relating to business;

(D) identify current terminology relating to business and technology; and

(E) identify classes of mail, special mailing services, and procedures of handling incoming and outgoing mail.

(4) Concepts and skills related to information management and control. The student shall be provided opportunities to:

- (A) identify equipment and supplies necessary for a filing system;
- (B) identify correct usage in applying terminology and procedures for indexing, coding, and filing using the alphabetic, numeric, subject, and geographic system;
- (C) identify, describe, and/or demonstrate procedures for controlling manual records and computerized information; and
- (D) identify a transfer and retention schedule.

(5) Concepts and skills necessary for the operation of office equipment. The student shall be provided opportunities to:

- (A) use the touch system to produce accurate mailable business documents using electronic equipment;
- (B) demonstrate the ability to enter and retrieve data using a computer;
- (C) use the touch system on the electronic calculator/computer to compute business problems;
- (D) identify appropriate reprographic processes for specific tasks; and
- (E) demonstrate ability to produce legible copies.

(6) Concepts and skills associated with the social implications of computers. The student shall be provided opportunities to:

- (A) examine issues concerning responsible use of computer systems; and
- (B) understand the social ramifications of computer applications related to privacy, values, and reliability of systems.

OFFICE ADMINISTRATIVE SYSTEMS II

State Board Approval Pending

75.87

Office Administrative Systems II (1, 2, or 3 units) shall include the following essential elements:

(1) *Advanced concepts and skill simulation related to office administration. The student shall be provided opportunities to:*

   (A) *perform duties and responsibilities common to most offices;*

   (B) *establish the workflow of an office or system;*

   (C) *relate office operations to the entire business organization;*

   (D) *establish priorities and develop organizational abilities; and*

   (E) *interpret data, make decisions, and apply information from resource materials.*

(2) *Advanced concepts and skills necessary for effective communications in the office environment. The student shall be provided opportunities to:*

   (A) *apply proper techniques in business telephone usage;*

   (B) *identify the use of teleprocessing systems for data exchange in an actual business setting;*

   (C) *compose and produce effective communication using the document production cycle;*

   (D) *use proper oral and written language skills relating to business; and*

   (E) *identify current terminology relating to business and technology.*

(3) *Advanced concepts and skills related to information management and control. The student shall be provided opportunities to:*

   (A) *demonstrate procedures for organizing and filing materials;*

   (B) *identify correct usage in applying terminology and procedures for indexing, coding, and filing using the alphabetic, numeric, subject, and geographic system; and*

   (C) *demonstrate procedures for accessing and maintaining computerized information.*

(4) Advanced concepts and skills simulation for the operation of office equipment. The student shall be provided opportunities to:

- *(A) demonstrate keyboarding speed and accuracy necessary for entry-level employment;*
- *(B) produce mailable business documents using microcomputers;*
- *(C) demonstrate the ability to enter and retrieve data using a computer;*
- *(D) use the touch system on the electronic calculator/computer to compute business problems; and*
- *(E) utilize appropriate reprographic processes for specific tasks, including desktop publishing.*

Appendix F

Essential Elements

BUSINESS INFORMATION PROCESSING

Changes Made to Essential Elements State Board Approval Pending

Business Information Processing I (one, two, or three units) shall include the following essential elements:

(1) Concepts and skills related to effective communication and production of business documents. The student shall be provided opportunities to:

- *(A) demonstrate proficiency in business English, spelling, and proofreading;*
- *(B) Identify and apply correct format for business correspondence and documents and mail merge;*
- *(C) demonstrate word processing procedures to steps in document production;*
- *(D) demonstrate proficiency in transcription; and*
- *(E) use proper techniques in business telephone usage.*

(2) Concepts and skills related to business information management. The student shall be provided opportunities to:

- *(A) identify procedures for controlling manual records by applying terminology and procedures for indexing, coding, and filing alphabetically;*
- *(B) demonstrate procedures for automated management of business records, including use of database management software for storage, retrieval, manipulation, selection, and reporting of records; and*
- *(C) identify business applications of electronic spreadsheets and demonstrate fundamental concepts and operational procedures related to their use.*

(3) Concepts and skills related to management of information flow out of, into, and within an office. The student shall be provided opportunities to:

- *(A) demonstrate computer-aided preparation and distribution of personalized correspondence, using electronic mail;*
- *(B) identify tools for preparing information for mass distribution and demonstrate desktop publishing and presentation graphic techniques;*

(C) *Apply the concepts of using communication systems both for accessing and using on-line information services, for transmission of outgoing information, and utilization of electronic bulletin boards; and*

(D) *demonstrate transportation of electronic images.*

(4) *Identify characteristics of contemporary office systems related to information processing and management. The student shall be given opportunities to:*

(A) *identify and/or observe office activity related to information processing and information management;*

(B) *identify responsibilities and procedures involved in business information processing with individuals working in the field;*

(C) *read and discuss current literature related to business information processing; and*

(D) *identify emerging information processing tools and understand their impact on business information processing.*

(5) *Concepts and skills associated with the social implications of computers. The student shall be provided opportunities to:*

(A) *examine issues concerning responsible use of computer systems;*

(B) *understand the social ramifications of computer applications related to privacy, values, and reliability of systems.*

Note: These variations were made with the approval of the State Director of Office Education in order to meet the computer requirements of some colleges and universities in the State.

BUSINESS INFORMATION PROCESSING II

State Board Approval Pending

75.87

Business Information Processing II (1, 2, or 3 units) shall include the following elements:

(1) Concepts and skills related to effective communication and production of business documents. The students shall be provided opportunities to:

- *(A) demonstrate proficiency in business English, spelling, proofreading in production of original business documents, and/or editing work previously created;*
- *(B) produce documents through the use of text manipulation and/or high-level integrated software; and*
- *(C) compose, dictate, and transcribe business documents.*

(2) Concepts and skills related to business information management. The students shall be provided opportunities to apply decision making skills:

- *(A) using advanced procedures and applications for automated management of business information using a database management system.*
- *(B) using advanced applications of electronic spreadsheets.*

(3) Concepts and skills related to management of information flow out of, into, and within an office. The students shall be provided opportunities to:

- *(A) integrate word processing, database, and spreadsheet software using import/export commands and/or ASCII files;*
- *(B) understand the process for setup installation and use of software by reading documentation prepared by the software manufacturer;*
- *(C) identify and apply concepts of layout and design in desktop publishing, including graphics, fonts, and paper for final copy;*
- *(D) demonstrate proficiency in the use of presentation graphics to aid in presentation of an oral report;*
- *(E) identify criteria for selection and evaluation of software; and*
- *(F) apply concepts related to transmitting information electronically.*

BUSINESS OFFICE SERVICES

75.87

(d) Coordinated Vocational Academic Education (CVAE) Business Office Services (1-2 units) shall include the following essential elements:

(1) Concepts and skills involved in keyboarding. The student shall be provided opportunities to:

(A) demonstrate the skills involved in keyboarding;

(B) apply appropriate procedures for proofreading and correcting errors; and

(C) demonstrate and identify information processing concepts in keyboarding.

(2) Concepts and skills necessary for filing. The student shall be provided opportunities to:

(A) demonstrate procedures used in alphabetic and numeric filing; and

(B) identify procedures used in electronic filing.

(3) Concepts and skills related to the operation of office equipment. The student shall be provided opportunities to:

(A) identify the procedures and equipment used in completing layouts for reprographics;

(B) identify the procedures used in operating reprographic equipment;

(C) demonstrate the ability to prepare masters and to operate the offset press;

(D) demonstrate the ability to use desktop publishing features;

(E) demonstrate the ability to solve mathematical problems using the touch method on the electronic calculator/computer keypad; and

(F) demonstrate the ability to enter and retrieve data on a microcomputer.

(4) Concepts and skills necessary for processing mail. The student shall be provided opportunities to:

(A) identify the procedures involved in processing incoming and outgoing mail; and

(B) identify the procedures involved in transmitting mail electronically.

(5) Concepts and skills necessary for effective communications. The student shall be provided opportunities to:

- (A) develop effective listening skills;
- (B) identify and use proper business techniques when using the telephone;
- (C) prepare effective written communications; and
- (D) identify and use proper language usage skills in business.

(6) Concepts and skills necessary for securing and maintaining employment. The student shall be provided opportunities to:

- (A) demonstrate the skills necessary for job application and interview; and
- (B) apply human relations skills and the ability to work with others.

(7) Concepts and skills associated with the social implications of computers. The student shall be provided opportunities to:

- (A) examine issues concerning responsible use of computer systems;
- (B) understand the social ramifications of computer applications related to privacy, values, and reliability of systems.

Appendix F

Essential Elements

BUSINESS COMPUTER APPLICATIONS I

Blended Course

75.87

(e) **Business Computer Applications I (1, 2, or 3 units) shall include the following essential elements:**

(1) Concepts and skills related to computer operations. The student shall be provided opportunities to:

(A) demonstrate comprehension of computer-related vocabulary;

(B) describe the functions of the components of a computer system;

(C) demonstrate and apply the capabilities of an operating system; and

(D) explore the concepts of telecommunication techniques and networking.

(2) Concepts and skills related to word processing. The student shall be provided opportunities to:

(A) demonstrate word processing concepts;

(B) apply higher-level capabilities of word processing tools and software; and

(C) understand the procedures and recognize the importance of merging data processing and word processing.

(3) Concepts and skills related to spreadsheets. The student shall be provided opportunities to:

(A) demonstrate higher-level spreadsheet concepts; and

(B) apply higher-level capabilities of spreadsheets.

(4) concepts and skills related to database management. The student shall be provided opportunities to:

(A) demonstrate database concepts, procedures, and capabilities; and

(B) apply higher-level capabilities of database management.

(5) Concepts and skills related to advanced application software. The student shall be provided opportunities to:

(A) discuss integration of people and computers for productivity;

(B) demonstrate the ability to apply information processing concepts and skills to realistic business situations;

(C) demonstrate the ability to apply information processing concepts and skills to realistic personal situations; and

(D) identify tools for preparing information for mass distribution including desktop publishing, graphics, and maintenance of electronic bulletin boards.

(6) Concepts and skills associated with the social implications of computers. The student shall be provided opportunities to

(A) examine issues concerning responsible use of computer systems; and

(B) understand the social ramifications of computer applications related to privacy, values, and reliability of systems.

Appendix F

Essential Elements

BUSINESS COMPUTER APPLICATIONS II

75.87

(f) Business Computer Applications II (1, 2, or 3 units) shall include the following essential elements:

(1) Concepts and skills related to teleprocessing. The student shall be provided opportunities to:

(A) describe the basic components of a teleprocessing system;

(B) demonstrate an understanding of network organization; and

(C) understand and identify the use of a teleprocessing system for data exchange in an actual business setting.

(2) Concepts and skills related to integrated systems. The student shall be provided opportunities to:

(A) understand and identify the advantages, capabilities, and functions of integrated software systems;

(B) manipulate data through the use of an integrated system; and

(C) use integrated systems to merge data from different applications.

(3) Concepts and skills related to graphics. The student shall be provided opportunities to:

(A) analyze and interpret business graphs and charts; and

(B) demonstrate graphic representation of data.

(4) Concepts and skills related to algorithmic approaches to problem solving. The student shall be provided opportunities to:

(A) demonstrate the ability to solve problems using appropriate analytical techniques; and

(B) demonstrate an awareness of the phases related to systems analysis and design.

(5) Concepts and skills related to applying logic to programming. The student shall be provided opportunities to:

(A) apply the appropriate analytical techniques in solving programming problems;

(B) translate the applied solution into a common programming or macro language; and

(C) demonstrate the ability to debug and audit a solution.

BUSINESS COMPUTER PROGRAMMING I

Blended Course

75.87

(g) Business Computer Programming I (1, 2, or 3 units) shall include the following essential elements:

(1) Concepts and skills related to computer data processing. The student shall be provided opportunities to:

(A) demonstrate comprehension of computer-related terminology; and

(B) identify the major components of computer systems.

(2) Concepts and skills related to hardware utilization. The student shall be provided opportunities to:

(A) review computer hardware operations;

(B) understand categorization of hardware according to size, application, and configurations;

(C) reinforce the ability to use basic operating systems; and

(D) review the proper care of hardware and software.

(3) Concepts and skills associated with algorithmic approaches to problem solving. The student shall be provided opportunities to:

(A) demonstrate the skills related to structured approaches to problem solving; and

(B) translate problems into logical steps using appropriate program design techniques.

(4) Concepts and skills associated with commands and statements of a programming language. The student shall be provided opportunities to:

(A) identify and use variables, constants, and literals;

(B) demonstrate the use of input and output statements;

(C) demonstrate and use conditional and unconditional branching statements;

(D) demonstrate and use looping techniques; and

(E) develop and use subroutines for modular programming.

(5) Concepts and skills related to program execution, testing, debugging, and documentation. The student shall be provided opportunities to:

- (A) demonstrate the ability to execute computer programs with sample data;
- (B) distinguish between syntax and logic errors;
- (C) apply standard debugging procedures; and
- (D) develop internal and external program documentation including record layout and report spacing charts.

(6) Concepts and skills associated with data storage. The student shall be provided opportunities to:

- (A) demonstrate an understanding of the types of media for data storage;
- (B) identify methods of storing data on storage devices; and
- (C) create and maintain a program to store and retrieve data from a file.

(7) Concepts and skills associated with the social implications of computers. The student shall be provided opportunities to:

- (A) examine issues concerning responsible use of computer systems; and
- (B) understand the social ramifications of computer applications related to privacy, values, and reliability of systems.

BUSINESS COMPUTER PROGRAMMING II

75.87

(h) Business Computer Programming II (1, 2, or 3 units) shall include the following essential elements:

(1) Concepts and skills related to application system development. The student shall be provided opportunities to:

(A) demonstrate a comprehension of the system development;

(B) demonstrate a comprehension of the implementation process; and

(D) develop user documentation.

(2) Concepts and skills related to structured programming application. The student shall be provided opportunities to:

(A) develop an understanding of structured programming;

(B) identify the concepts of random and sequential files;

(C) translate solutions into major structural elements of a program;

(D) translate solutions into language statements for input, processing, and output; and

(E) develop ability to use an advanced operating system computer.

(3) Concepts and skills related to program testing. The student shall be provided opportunities to:

(A) develop test data and testing techniques;

(B) apply test data to programs run on the computer; and

(C) demonstrate the ability to debug and audit programs.

(4) Concepts and skills associated with software implementation and maintenance. The student shall be provided opportunities to:

(A) write documentation for maintaining a system;

(B) understand the process of implementing a system into production status; and

(C) develop an understanding of the programmer responsibilities in program maintenance.

OFFICE SUPPORT SYSTEMS

75.87

(i) Office Support Systems (1/2 or 1 unit) shall include the following essential elements:

(1) Concepts and skills involved in keyboarding. The student shall be provided opportunities to:

(A) demonstrate the skill of keyboarding letters, memos, forms, and reports;

(B) apply appropriate procedures for proofreading and correcting errors; and

(C) demonstrate and identify information processing concepts in keyboarding.

(2) Concepts and skills necessary for filing. The student shall be provided opportunities to:

(A) demonstrate procedures used in alphabetic, numeric, subject, and geographic filing; and

(B) identify procedures used in electronic filing.

(3) Concepts and skills necessary for financial activities. The student shall be provided opportunities to:

(A) demonstrate the ability to maintain a checking account; and

(B) demonstrate the procedures involved in preparing a payroll and preparing tax reports.

(4) Concepts and skills necessary for processing mail. The student shall be provided opportunities to:

(A) identify the procedures involved in processing incoming and outgoing mail; and

(B) identify the procedures involved in transmitting mail electronically.

(5) Concepts and skills necessary for effective communications. The student shall be provided opportunities to:

(A) identify and use proper business techniques when using the telephone;

(B) prepare effective written communications; and

(C) identify and use proper language usage skills in business.

(6) Concepts and skills necessary for effective understanding of business operations. The student shall be provided opportunities to:

- (A) describe the role of business in the enterprise system; and
- (B) identify the general responsibilities of employees.

(7) Concepts and skills necessary for securing and maintaining employment. The student shall be provided opportunities to:

- (A) demonstrate the skills necessary for job application and interview; and
- (B) apply human relations skills and the ability to work with others.

MICROCOMPUTER APPLICATIONS

75.87

(j) Microcomputer Applications (1/2 or 1 unit) shall include the following essential elements:

(1) Fundamental concepts and operational skills related to microcomputer systems. The student shall be provided opportunities to:

(A) understand the background and uses for computer systems;

(B) demonstrate competency in touch keyboarding, including technique, speed, and accuracy;

(C) understand the components of computer systems, including hardware, operating environments, and application software; and

(D) demonstrate competency in microcomputer systems operation.

(2) Concepts and skills necessary for microcomputer-based document production, formatting, and proofreading, at least including use of word processing software and automated spellchecking software. The student shall be provided opportunities to:

(A) identify and use the terminology related to word processing;

(B) demonstrate the operational procedures used in document production and page layout; and

(C) employ appropriate steps in producing documents.

(3) Concepts and skills necessary for use of microcomputer-based storage, retrieval, manipulation, and reporting information, at least including use of database management software. The student shall be provided opportunities to:

(A) identify and use the terminology related to information management;

(B) demonstrate the operational procedures and techniques used in information management software;

(C) use microcomputer software to design databases, enter and manipulate information, and produce reports (including graphic display of summary reports); and

(D) conduct keyword database searches using logic operations such as AND, OR, and NOT.

(4) Concepts and skills necessary for use of microcomputer-based computation, analysis, planning, and reporting with numeric data, at least including use of electronic spreadsheets. The student shall be provided opportunities to:

   (A) identify and use the terminology related to electronic manipulation of numeric data;

   (B) demonstrate operational procedures and techniques used with microcomputer software for processing numeric data;

   (C) use microcomputer software for computation, analysis, planning, and reporting (including graphic display) with numeric data; and

   (D) apply electronic spreadsheet software both through use of prepared templates and with student-designed problem solutions.

(5) Concepts and skills related to emerging microcomputer-based information processing tools. The student shall be provided opportunities to:

   (A) understand the concept of exchanging information via telecommunication software, at least including electronic mail, remote bulletin board access, and access of on-line information services;

   (B) understand and use features of integrated software packages to share data among applications;

   (C) understand concepts and identify characteristics and uses associated with tools for desktop publishing and generation of presentation graphics;

   (D) understand concepts related to transporting of textual and nontextual data both locally and remotely, at least including transporting of text and facsimile images electronically, and physical transfer of ultra-high-density storage media; and

   (E) understand concepts related to networked and multi-user configurations.

(6) Concepts associated with the social implications of computers. The student shall be provided opportunities to:

   (A) examine issues concerning responsible use of computer systems;

   (B) understand the social ramifications of computer applications related to privacy, values, and reliability of systems; and

   (C) understand the impact of computing on leisure and household management.

Appendix F

Essential Elements

BUSINESS FINANCIAL APPLICATIONS

75.87

(k) Business Financial Applications (1/2 or 1 unit) shall include the following essential elements:

(1) Concepts and skills related to banking operations. The student shall be provided opportunities to:

- (A) identify and understand checking accounts;
- (B) understand fundamentals of teller operations; and
- (C) identify and understand bookkeeping systems.

(2) Concepts and skills related to credit administration. The student shall be provided opportunities to:

- (A) understand methods of credit investigation; and
- (B) understand concepts related to the use of credit analysis.

(3) Concepts and skills related to loans. The student shall be provided opportunities to:

- (A) identify types of loans and purposes; and
- (B) demonstrate and understand calculation of interest and payoff.

(4) Concepts and skills related to legal aspects of banking. The student shall be provided opportunities to:

- (A) understand customer and consumer services; and
- (B) understand regulations of financial intermediaries.

(5) Concepts and skills related to other financial institutions. The student shall be provided opportunities to:

- (A) understand and explore savings and loan operations; and
- (B) understand and explore credit union operations.

Appendix F

Essential Elements

MEDICAL ADMINISTRATIVE SYSTEMS

Course Title and Essential Elements Pending State Board Approval

75.87

(1.1) Medical Administrative Systems (1,2, or 3 units) shall include the following essential *elements:*

(1) Concepts and skills related to administering a medical office. The student shall be provided opportunities to:

(A) perform duties and responsibilities common to most offices.

(B) identify current terminology relating to the medical industry and to technology; and

(C) identify social implications as related to the medical industry.

(2) Concepts and skills necessary for use of word processing software and equipment and tools to produce microcomputer-based medical document production. The student shall be provided opportunities to:

(A) demonstrate keyboarding speed and accuracy necessary for entry-level employment;

(B) apply proofreading techniques in addition to using automated spell-checking, thesaurus, and grammar checking software.

(C) apply word processing skills using computer-based tools by employing appropriate steps for medical document production;

(D) apply correct format for general and medical correspondence and documents; and

(E) apply page layout techniques to desktop publishing documents.

(3) Concepts and skills related to effective communication. The students shall be provided opportunities to:

(A) use proper oral and written language skills relating to the medical industry;

(B) demonstrate proficiency in business English, spelling, and proofreading;

(C) compose and prepare effective medical communications using the document production cycle;

  - (D) *apply proper techniques in business telephone usage;*
  - (E) *recognize classes of mail, special mailing services, and procedures of handling incoming and outgoing mail;*

(4) *Concepts and skills related to information management and control of medical documents. The student shall be provided opportunities to:*

  - (A) *apply procedures of controlling manual records by applying terminology and procedures for indexing, coding, and filing alphabetically; and*
  - (B) *demonstrate procedures for controlling computerized information.*

(5) *Concepts and skills necessary for the operation of office equipment. The student shall be provided opportunities to:*

  - (A) *demonstrate proficiency in transcription;*
  - (B) *use the touch system on the electronic calculator/computer to compute business problems related to a medical office; and*
  - (C) *apply reprographic techniques; and*
  - (D) *transport images electronically.*

(6) *Concepts and skills related to processing of medical insurance. The student shall be provided opportunities to:*

  - (A) *demonstrate procedures used in processing government claims; and*
  - (B) *demonstrate procedures used in processing private carrier claims.*

(7) *Concepts and skills related to the daily accounting cycle. The student shall be provided opportunities to:*

  - (A) *demonstrate procedures used in operating a pegboard system; and*
  - (B) *demonstrate procedures used in a computerized medical office accounting system.*

Appendix F

Essential Elements

LEGAL ADMINISTRATIVE SYSTEMS

Specialty Course—Course Title and Essential Elements Pending State Board Approval

75.87

(l.1) Legal Administrative Systems (1,2, or 3 units) shall include the following essential elements:

(1) *Concepts and skills related to administering a legal office. The student shall be provided opportunities to:*

  (A) *perform duties and responsibilities common to most offices.*
  Identify and understand and organizational chart.
  Explain data and information flows within a legal facility

  (B) *identify current terminology relating to the legal industry and to technology; and*
  Use and identify terminology related to the legal industry and to technology.

  (C) *identify social implications as related to the legal industry.*
  Identify the major issues and technological developments related to the legal industry and technology.
  Describe the ethical and legal issues that have arisen as a result of the computer revolution.
  Identify privacy issues involved with electronic data storage.

(2) *Concepts and skills related to effective communication. The students shall be provided opportunities to:*

  (A) *use proper oral and written language skills relating to business;*

  (B) *demonstrate proficiency in business English, spelling, and proofreading;*

  (C) *compose and prepare effective legal communications using the document production cycle;*

  (D) *apply proper techniques in business telephone usage;*

  (E) *recognize classes of mail, special mailing services, and procedures of handling incoming and outgoing mail;*

(3) Concepts and skills necessary for use of word processing software and equipment and tools to produce microcomputer-based legal document production. The student shall be provided opportunities to:

- *(A) demonstrate keyboarding speed and accuracy necessary for entry-level employment;*
- *(B) apply proofreading techniques in addition to using automated spellchecking, thesaurus, and grammar checking software.*
- *(C) apply word processing skills using computer-based tools by employing appropriate steps for legal document production;*
- *(D) apply correct format for general and legal correspondence and documents; and*
- *(E) apply page layout techniques to desktop publishing documents.*

(4) Concepts and skills related to information management and control of legal documents. The student shall be provided opportunities to:

- *(A) apply procedures of controlling manual records by applying terminology and procedures for indexing, coding, and filing alphabetically; and*
- *(B) demonstrate procedures for controlling computerized information.*

(5) Concepts and skills necessary for the operation of office equipment. The student shall be provided opportunities to:

- *(A) demonstrate proficiency in transcription;*
- *(B) use the touch system on the electronic calculator/computer to compute business problems related to a legal office; and*
- *(C) apply reprographic techniques; and*
- *(D) transport images electronically.*

Appendix F

Essential Elements

INSURANCE ADMINISTRATIVE SYSTEMS

Specialty Course—State Board Approval Pending

75.87

(l.3) Insurance Administrative Systems (1, 2, or 3 units) shall include the following essential elements:

(1) *Concepts and skills related to general insurance. The student shall be provided opportunities to:*

- (A) *understand and explain the origins of insurance;*
- (B) *identify the different types of losses that property owners are faced with and which are covered by insurance policies;*
- (C) *explain the different risks that are involved which warrant obtaining insurance;*
- (D) *differentiate between pure risks and speculative risks that may be encountered by the insured;*
- (E) *identify requirements of an insurable risk and the items which may prevent obtaining insurance;*
- (F) *explain society's costs/benefits with insurance and the reasons in favor of purchasing insurance;*
- (G) *interpret insurance regulations as they pertain to policyholders;*
- (H) *identify the procedures required for obtaining financial solvency;*
- (I) *explain the activities of agents and the importance of agents to an agency;*
- (J) *analyze the methods used by agencies in pricing insurance policies;*
- (K) *assemble and prepare for submission insurance contracts;*
- (L) *explain how insurance can be justified as being a product;*
- (M) *identify and explain the different parts contained in an insurance policy;*
- (N) *compare and contrast the duties applicable to an agent to those of a broker;*
- (O) *diagram and explain the path of an insurance policy from the point of contact with the prospect to settlement of a claim; and*

(P) simulate the myriad of activities performed by the members of an insurance agency.

(2) Concepts and skills related to automobile insurance. The student shall be provided opportunities to:

- *(A) understand and apply insurance terminology correctly in written and oral communication;*
- *(B) explain the role of insurance concepts to society;*
- *(C) differentiate the sections contained in a personal automobile policy;*
- *(D) identify the information contained in an insuring agreement;*
- *(E) prepare quotations for coverages by use of the rating manual and computer;*
- *(F) explain the different coverages available and the advantages and disadvantages of each;*
- *(G) illustrate the effect of variables in preparing quotes, i.e., limits, classifications, territories, and symbols; and*
- *(H) prepare appropriate documents for insurance transactions.*

(3) Concepts and skills related to homeowners insurance. The student shall be provided opportunities to:

- *(A) explain the concept regarding eligibility for insurance coverage;*
- *(B) identify the information contained in the insuring agreement;*
- *(C) identify and understand personal checking accounts;*
- *(D) identify and understand personal loan application processes;*
- *(E) identify and understand different financial institutions;*
- *(F) identify the role and functions of business management;*
- *(G) understand the lines of authority; and*
- *(H) identify effective supervisory techniques.*

BANKING AND FINANCIAL SYSTEMS

Specialty Course—Course Title and Essential Elements Pending State Board Approval

75.87

(l.1) Banking and Financial Systems (1,2, or 3 units) shall include the following essential elements:

(1) *Concepts and skills related to banking operations. The student shall be provided opportunities to:*

- (A) *identify and understand checking accounts;*
- (B) *understand fundamentals of teller operations; and*
- (C) *identify and understand bookkeeping systems.*

(2) *Concepts and skills related to credit administration. The student shall be provided opportunities to:*

- (A) *understand methods of credit investigation; and*
- (B) *understand concepts related to the use of credit analysis.*

(3) *Concepts and skills related to loans. The student shall be provided opportunities to:*

- (A) *identify types of loans and purposes; and*
- (B) *understand regulations of financial intermediaries.*

(4) *Concepts and skills related to other financial institutions. The student shall be provided opportunities to:*

- (A) *understand and explore savings and loan operations; and*
- (B) *understand and explore credit union operations.*

BUSINESS OFFICE CLERICAL

75.87

(m) Coordinated Vocational Academic Education (CVAE) Business Office Clerical (1-2 units) shall include the following essential elements:

(1) Concepts and skills involved in keyboarding. The student shall be provided opportunities to:

- (A) demonstrate the skills involved in keyboarding;
- (B) apply appropriate procedures for proofreading and correcting errors; and
- (C) demonstrate and identify information processing concepts in keyboarding.

(2) Concepts and skills necessary for filing. The student shall be provided opportunities to:

- (A) demonstrate procedures used in alphabetic and numeric filing; and
- (B) identify procedures used in electronic filing.

(3) Concepts and skills related to the operation of office equipment. The student shall be provided opportunities to:

- (A) identify the procedures and equipment used in completing layouts for reprographics;
- (B) identify the procedures used in operating reprographic equipment;
- (C) demonstrate the ability to use desktop publishing features;
- (D) demonstrate the ability to solve mathematical problems using the touch method on the electronic calculator/computer keypad; and
- (E) demonstrate the ability to enter and retrieve data on a microcomputer.

(4) Concepts and skills necessary for processing mail. The student shall be provided opportunities to:

- (A) identify the procedures involved in processing incoming and outgoing mail; and
- (B) identify the procedures involved in transmitting mail electronically.

(5) Concepts and skills necessary for effective communications. The student shall be provided opportunities to:

- (A) develop effective listening skills;
- (B) identify and use proper business techniques when using the telephone;
- (C) prepare effective written communications; and
- (D) identify and use proper language usage skills in business.

(6) Concepts and skills necessary for securing and maintaining employment. The student shall be provided opportunities to:

- (A) demonstrate the skills necessary for job application and interview; and
- (B) apply human relations skills and the ability to work with others.

(7) Concepts and skills associated with the social implications of computers. The student shall be provided opportunities to:

- (A) examine issues concerning responsible use of computer systems;
- (B) understand the social ramifications of computer applications related to privacy, values, and reliability of systems.

APPENDIX G

Lesson Plan Development

STEPS IN LESSON PLANNING

Because of the nature of the Microcomputer Applications course, individual lesson plans for each day have not been provided. It is expected that the sequence of units and production skills in this course will be taught in a variety of ways as schools and teachers meet local and student needs. The curriculum outlines at the beginning of each unit provide instructional information for preparing lesson plans.

The guide was developed with flexibility to allow for a variety of teaching methods. Units can be used out of sequence and most can be performed independently by students. A sample lesson format is included.

Divisions of the Lesson Plan

Good teaching is based on good planning, presentation, and discipline. The following components were designed to help the teacher in all three areas.

1. **Unit Title**—the unit title identifies the broad area of which the specific lesson is a part.
2. **Lesson Title**—the lesson title identifies a category of the unit for which instruction is delivered.
3. **Estimated Time**—the time frame clues the instructor in determining the scope of each lesson and helps with long-term planning and time management.
4. **Essential Elements**—identifying essential elements helps the instructor focus and plan for instruction.
5. **Domains**—effective lessons teach to the cognitive domain (knowledge or information), psychomotor domain (skills), and affective domain (values or attitudes). The effective instructor keeps these in mind when selecting the teaching materials, strategies, and tools for a particular lesson.
6. **Basic Skills**—all lessons call upon the students' basic skills in the areas of reading, writing, and math. Attention to integration of those skills with microcomputer applications on the part of the teacher lends to reinforcement and improvement of those skills on the part of the student.
7. **Student Competencies**—students are expected to acquire specific competencies. Competencies are identified for each lesson.
8. **Teacher Preparation**—the instructor decides on the material resources (equipment, supplies, and materials, such as charts, tables, books), needed for the lesson. Student materials should also be considered. Plans for field trips should be formalized.
9. **Teacher Presentation**—the effective instructor thinks about and plans his/her classroom presentations beforehand. Part of this process is selecting appropriate teaching strategies. Examples are demonstration, questioning, discussion, drill, and lecture. Strategies should be selected based (1) on the kind of lesson being taught and (2) on the learning needs of the students for whom the

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instruction is intended. Presentation should proceed, step by step, simple to complex, with teaching points interspersed in the sequence.

10. **Student Activities**—practice is the keynote of successful teaching and learning in the field of vocational/technical education. Activities assigned to the students are the part of the lesson that makes use of this principle.

11. **Assignment**—the assignment part of the lesson is a continuation of the student activities. Assignments should provide meaningful application of the concept just learned as an aid to retention.

12. **Evaluation**—both the teacher and the student need some method of feedback for determining whether learning has taken place. The system for doing this is called evaluation. Evaluation in vocational-technical subjects should include a variety of methods.

    Norm-Referenced Testing—a form of educational measurement that ascertains an individual's performance in relation to the performance of other individuals on the same measuring device. Because the individual is compared with some normative group, such measures are described as norm-referenced. Standardized objective tests are norm referenced tests

    Criterion-Referenced Testing—a form of educational measurement that ascertains an individual's attainment of some criterion or performance standard. Some examples of how a criterion-referenced test item might be worked are:

    - Attached is a simple program. By the next class day, enter and run the program. The program must be debugged. A score of 100% is required.

    - Attached is a list of programming terminology. Define the terms. A score of 75% or higher is required. Maximum time is 40 minutes.

    Because the curriculum guide is based on performance-based instruction with specified student competencies, criterion-referenced testing is appropriate for measuring student performance.

    There are three essential steps to remember in implementing criterion-referenced measurement.

    1. Prior to instruction, prepare a set of instructional objectives for the unit.
    2. Select appropriate assessment approaches/techniques to assess students' mastery of the stated objectives. The appropriateness of the technique selected will largely be determined by the nature of the skill or competency specified in the objective.
    3. Match particular assessment techniques selected with the performance behaviors delineated in the instructional objectives. It is important that the specific test item correspond to the level and type of behavior specified in the objective. In other words, test on the same level that you teach.

    Other methods of evaluation —teacher observation of skill and/or attitude, production measures, and accuracy measures.

13. **Closure**—closure comes at the end of the lesson and ties everything together. With closure the instructor guides the students into seeing how the parts contribute to make the whole. Effective closure results in a feeling of understanding, accomplishment, and well being.

SAMPLE LESSON PLAN FORMAT

COURSE______________________________INSTRUCTOR________________________

Unit Title ____

LESSON TITLE ____

Estimated Time__________________________________(Hours or Days)

Essential Element(s)____

Domain(s) _____Cognitive _____Psychomotor _____Affective

Basic Skill(s) _____Reading _____Writing _____Mathematics

Student Competency(ies)____

Teacher Preparation **Resources**

Teacher Presentation **Teaching Strategies**

Student Activities **Resources**

Assignment(s)

Evaluation

Closure

MAJOR CATEGORIES IN THE COGNITIVE DOMAIN

Evaluation

involves acts of decision making, judging, or selecting based on criteria and rationale **requires synthesis in order to evaluate**

Synthesis

combines elements to form new entity from original one **requires analysis in order to synthesize**

Analysis

separates whole into its parts, until relationship among elements is clear **requires ability to apply information in order to analyze**

Application

uses information in a situation different from original learning context **requires comprehension of information in order to apply in new situation**

Comprehension

interprets, translates, summarizes, or paraphrases given information **requires knowledge in order to demonstrate comprehension**

Knowledge

recognition and recall of facts and specifics

VERBS FOR STATING BEHAVIORAL OBJECTIVES

Cognitive Domain

1. **Knowledge**—remembering previously learned materials

Cite
Define
Identify
Label
List
Match
Name
Quote
Recite
Reproduce
Pronounce
State

2. **Comprehension**—ability to grasp the meaning of material

Alter
Change
Convert
Depict
Describe
Explain
Give examples
Illustrate
Interpret
Paraphrase
Portray
Rephrase
Represent
Restate
Reword
Simplify
Substitute
Summarize
Translate
Vary

3. **Application**—ability to use learned material in new and concrete situations

Apply
Compute
Demonstrate
Direct
Discover
Employ
Evidence
Manifest
Manage
Predict
Prepare
Present
Relate
Show
Solve
Utilize

4. **Analysis**—ability to break down material into its component parts so its organizational structure can be understood

Ascertain
Analyze
Associate
Designate
Determine
Diagnose
Diagram
Differentiate
Discriminate
Dissect
Distinguish
Divide
Examine
Find
Infer
Outline
Point out
Reduce
Separate

5. **Synthesis**—ability to put parts together to form a whole

Combine
Compile
Compose
Conceive
Create
Design
Develop
Devise
Expand
Extend
Generalize
Integrate
Invent
Modify
Originate
Plan
Pose
Propose
Project
Rearrange
Revise
Rewrite
Synthesize
Theorize
Write

6. **Evaluation**— ability to judge the value of material for a given purpose

Appraise
Assess
Compare
Conclude
Contrast
Criticize
Critique
Deduce
Evaluate
Judge
Weigh

MAJOR CATEGORIES IN THE PSYCHOMOTOR DOMAIN

Naturalization

completes one or more skills with ease and becomes automatic with limited physical or mental exertion

Articulation

combines more than one skill in sequence with harmony and consistency

Precision

reproduces a skill with accuracy, proportion, and exactness; usually performed independent of original source

Manipulation

performs skill according to instruction rather than observation

Imitation

observes skill and attempts to repeat it

VERBS FOR STATING BEHAVIORAL OBJECTIVES

Psychomotor Domain

1. **Perception**—becoming aware of the action to be performed through sensory stimulation

Detect
Examine
Feel
Handle
Hear
Hold
Note
Notice
Observe
Perceive
Recognize
See
Sense
Smell
Taste
Touch

2. **Set**—becoming ready to act mentally, physically, and emotionally

Adjust
Check
Confirm
Decide
Estimate
Familiarize
Locate
Place
Position
Ready
Regulate
Select
Set
Set up
Sit
Situate
Stand
Station

3. **Guided response**—performing the action under supervision through imitation or trial and error

Attempt
Carry out
Copy
Duplicate
Experiment
Follow
Imitate
Mimic
Practice
Repeat
Reproduce
Test
Try

4. **Mechanism**—performing the act habitually with some degree of confidence

Acquire
Assemble
Complete
Conduct
Construct
Do
Execute
Gain
Improve
Maintain
Make
Manipulate
Measure
Operate
Pace
Perform
Proceed
Produce
Progress
Use

5. **Complex overt response**—performing the act automatically with high level of skill

Achieve
Accomplish
Advance
Attain
Automatize
Exceed
Excel
Master
Perfect
Reach
Refine
Succeed
Surpass
Transcend

MAJOR CATEGORIES IN THE AFFECTIVE DOMAIN

Characterizing

total behavior is consistent with values internalized

Organizing

committed to set of values as displayed by behavior

Valuing

displays behavior consistent with single belief or attitude in situations where he/she is not forced to comply or obey

Responding

complies with given expectations by attending or reacting to stimuli or phenomena; i.e., interests

Receiving

aware of; passively attending to certain phenomena and stimuli; i.e., listening

VERBS FOR STATING BEHAVIORAL OBJECTIVES

Affective Domain

1. **Receiving**—attending and becoming aware of a situation, idea, or process through the sensory organs

Acknowledge
Attend
Be aware
Listen
Look
Pay attention
Receive
Show alertness
Tolerate
View
Watch

2. **Responding**—doing something about a situation, idea, or process

Agree (to)
Answer
Ask
Assist
Be willing
Communicate
Comply
Consent
Contribute
Cooperate
Discuss
Follow up
Indicate
Inquire
Obey
Participate
Pursue
Question
React
Read
Reply
Request
Respond
Seek
Visit
Volunteer

3. **Valuing**—developing attitudes by choosing, prizing, cherishing

Accept
Adopt
Approve
Choose
Commit
Desire
Display
Endorse
Exhibit
Express
Form
Initiate
Prefer
Sanction

4. **Organization**—arranging values in priority according to a system

Adapt
Arrange
Categorize
Classify
Establish
Formulate
Group
Order
Organize
Rank
Rate
Systemize

5. **Characterization**—choosing the same values consistently to form a philosophy of life

Act
Advocate
Be consistent
Behave
Characterize
Conform
Continue
Defend
Devote
Disclose
Encourage
Endure
Exemplify
Function
Habituate
Incorporate
Influence
Justify
Maintain
Pattern
Persist
Preserve
Recommend
Remain
Retain
Reveal
Serve
Support
Uphold
Urge
Verify

APPENDIX H

Special Needs

ADAPTING FOR SPECIAL NEEDS STUDENTS

The methods of instruction used in office education courses which make them unique make courses viable for students with special needs. Because a variety of learning styles are addressed in instructional delivery, modification is seldom necessary unless the student has a handicapping condition. The instructor should always seek advice and assistance from special education teachers, counselors, and school administrators if any student is having difficulty mastering the objectives of the course. Following are suggestions for adapting instructional methods and materials for special needs students. The suggestions are arranged alphabetically according to the specific handicapping condition.

Emotionally Disturbed

1. Seek the assistance of the school counselor and/or school psychologist in determining methods to cope with deviant student behavior.
2. Be warm and empathetic—trust is important in establishing any relationship, especially with these students.
3. Teach problem-solving skills.
4. Utilize operant conditioning—keeping a record of behavior is recommended to test the stability of a student's behavior.

Hearing Impaired

1. Always write directions on the board, or write them on assignment sheets.
2. If a student is skilled in lip reading, face him/her when speaking.
3. If audio methods are used to supplement instruction, write out important points covered in the audio presentation.
4. Seat the student in the front of the room.
5. Assign a hearing student to provide peer tutoring for the hearing-impaired student.

6. A mild to moderate hearing loss can hinder a student's ability to understand language concepts and structure. Remediation in language development should occur in the resource room, but be aware of this problem when developing grading procedures.

Learning Disabled

1. Plan specific instructional strategies when a student's type of learning disability has been determined.
2. Gear instructional methods to the sense or style through which the student learns best.
3. Divide lessons into their component subskills and teach in smaller units.

Mentally Retarded

1. Use unit approaches as an instructional strategy. If vocabulary and sentence structure are simplified, and if concrete illustrations and exercises are provided research suggests that mildly mentally retarded students can master relatively complex material.
2. Learning should be programmed in sequence and presented in such a way that the student will learn at a rate compatible with his/her development.
3. Proceed in a systematic way so basic knowledge precedes more difficult material.
4. Help the student experience success. Organize materials and use methods that lead him/her to the right answer.
5. Provide feedback. Let the student know when he/she responds correctly.
6. Provide for positive transfer of knowledge from one situation to another
7. Help the student discover general fundamental principles.
8. Provide repetition of learned experiences. Mentally retarded students require more repetitions of an experience to retain the information.
9. Avoid confusing the student. Associate a given stimulus or cue with only one response in the early stages of learning.
10. Limit the number of concepts presented in any one class period.

Visually Impaired

1. Use materials which are concrete. The student must be presented with concrete objects that he/she can touch and manipulate.

2. Unify experiences. Use sequencing and explain the sequencing.

3. Learn by doing. Foster self-motivation and activity for students. Objects do not attract blind children. Their ability to listen, relate, and remember must be developed to the fullest.

4. Use lamps and rheostat with variable intensities. By varying light intensities and positioning, lamps can provide the additional or dimmed illumination that a visually-impaired student might require.

5. Make use of large-type books provided by the Commission for the Blind.

6. Provide raised line paper (writing paper, graph paper, etc.) Raised line paper allows a student to write script "on the line" or to make a graph by placing markers or by punching holes onto the graph paper.

7. Provide cassette tape recorders. Students can use the recorder to take notes, listen to recorded texts, or complete assignments.

8. Use talking calculators. These hand-held calculators speak each entry and result. Earphones are available.

9. Allow more time. Students will frequently need extra time to complete assignments and examinations. Allowing time and a half is usually adequate.

COMPLIANCE STATEMENT

TITLE VI, CIVIL RIGHTS ACT OF 1964; THE MODIFIED COURT ORDER, CIVIL ACTION 5281, FEDERAL DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TYLER DIVISION

Reviews of local education agencies pertaining to compliance with Title VI Civil Rights Act of 1964 and with specific requirements of the Modified Court Order, Civil Action No. 5281, Federal District Court, Eastern District of Texas, Tyler Division are conducted periodically by staff representatives of the Texas Education Agency. These reviews cover at least the following policies and practices:

(1) acceptance policies on student transfers from other school districts;

(2) operation of school bus routes or runs on a non-segregated basis;

(3) nondiscrimination in extracurricular activities and the use of school facilities;

(4) nondiscriminatory practices in the hiring, assigning, promoting, paying, demoting, reassigning, or dismissing of faculty and staff members who work with children;

(5) enrollment and assignment of students without discrimination on the basis of race, color, or national origin;

(6) nondiscriminatory practices relating to the use of a student's first language; and

(7) evidence of published procedures for hearing complaints and grievances.

In addition to conducting reviews, the Texas Education Agency staff representatives check complaints of discrimination made by a citizen or citizens residing in a school district where it is alleged discriminatory practices have occurred or are occurring.

Where a violation of Title VI of the Civil Rights Act is found, the findings are reported to the Officer for Civil Rights, Department of Health, Education and Welfare.

If there is a direct violation of the Court Order in Civil Action No. 5281 that cannot be cleared through negotiations, the sanctions required by the Court Order are applied.

TITLE VII, CIVIL RIGHTS ACT OF 1964; EXECUTIVE ORDERS 11246 AND 11375; TITLE IX, 1973 EDUCATION AMENDMENTS; REHABILITATION ACT OF 1973 AS AMENDED; 1974 AMENDMENTS TO THE WAGE-HOUR LAW EXPANDING THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967; AND VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1972 AS AMENDED IN 1974.

It is the policy of the Texas Education Agency to comply fully with the nondiscrimination provisions of all federal and state laws and regulations by assuring that no person shall be excluded from consideration for recruitment, selection, appointment, training, promotion, retention, or any other personnel action, or be denied any benefits or participation in any programs or activities which it operates on the grounds of race, religion, color, national origin, sex, handicap, age, or veteran status (except where age, sex, or handicap constitute a bona fide occupational qualification necessary to proper and efficient administration). The Texas Education Agency makes positive efforts to employ and advance in employment all protected groups.

BEST COPY AVAILABLE

BUSINESS INFORMATION PROCESSING SIMULATIONS

Prepared by

Jan Patton
Office Education Curriculum Specialist

Published by
Educational Development and Training Center
East Texas State University
Commerce, Texas

in cooperation with
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To ensure educational equity, this material has been reviewed to eliminate bias or stereotyping.

EDTC
Educational Development & Training Center
East Texas State University • Commerce, TX 75429

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PREFACE

The simulations for the *Business Information Processing Curriculum* were prepared to provide quality instructional materials for instructors of Business Information Processing courses in Texas.

These simulations have been developed through a joint effort of the Texas Education Agency and the Educational Development and Training Center located on the campus of East Texas State University at Commerce, Texas.

The purpose of developing these simulations is to provide Business Information Processing instructors and students with realistic business activities that are coordinated with the *Business Information Processing Curriculum*. Suggestions and comments concerning these simulations are requested to be sent to the curriculum specialist at the Educational Development and Training Center.

How to Use Simulation Materials

A simulation has been prepared for most sections of the *Business Information Processing Curriculum*. Each simulation is based on working in a variety of positions in a specific company.

The simulations are versatile and may be used in many different ways. However, they should not be completed until after the section or unit of the guide has been completed. The simulations may serve as a culminating test or as additional activities to tie in all of the concepts taught in the section. They may be used at the end of the semester or school year to review the concepts studied.

Most of the simulations require the use of a microcomputer. The simulations are designed to adapt to any type of microcomputer system and to the software packages of your choice. **It is assumed students already have a working knowledge of the software packages on which they will be working.** You should decide what reference materials will be provided for the students.

Brief instructions and an evaluation sheet are provided for the teacher at the beginning of each simulation. Most answers are provided. Some simulations do not lend themselves to standard answers; therefore, the teacher must decide what grading standards to use. Clarifications are provided in the instructions or the answers when necessary.

Activities are at the end of each simulation. They begin with a greeting and welcome to the company. This portion may be duplicated for your students, or you may purchase student materials from EDTC. This would save time in duplicating and organizing. Call for availability and prices (800) 356-3382.

Business Information Processing

Word Processing

Simulation

INSTRUCTIONS

This is a simulation prepared for the word processing section covered in the *Business Information Processing Curriculum Guide*. The simulation should be completed after the study of the reference materials in **Section III: Processing Information**. Students should have studied and completed all work for the Word Processing Concepts and Document Production units. The competency tests following these units should determine if the students are ready for the hands-on simulation.

The Word Processing simulation should be performed on a computer. Your students will need access to a computer, a blank disk for data storage, and a word processing software package of your choice. It is assumed that you have spent time to acquaint the students with both the computer and word processing software which they will use.

This simulation contains the following word processing activities:

- Letters
- Interoffice Memo
- Flyer
- Itinerary
- Tables
- Price Lists
- Letter Using Merge Feature

SPECIFIC INSTRUCTIONS

Make sure the students have access to a copy of the Office Procedures Manual. They are referred to it several times throughout the simulation for formats and other information. The date needed information should be the order the students prepare the documents. An order number in brackets has been placed after each document title on the next page.

Note that placing frames around the answers slightly distorts the document and does not leave proper margins.

DR: 1031--Sales Department Memo (2)

1. Have students prepare memo format to fit on the memo stationery.
2. Students are requested to make copies for each of the branch office managers and to circulate one memo around the office using a routing slip.

DR: 1051--Letter to Miss Green (3)

Students have been instructed to prepare an envelope. Either provide envelopes for the students or make copies of the blank envelope provided in the simulation. If you have a long carriage printer or laser, you may wish to figure out the appropriate line settings to print the envelope using the computer's landscape (sideways) feature. Otherwise, have the student keyboard the envelope page format using a typewriter.

DR: 1093--New Items Price List (4)

If you have a table setup feature on the word processing package you are using, you may wish to review the students on the procedures for its use. Or, if the forms feature is available, you may wish to have advanced students design a form for this table and then save it and fill it in. You may wish to copy the form file and have the other students fill it in.

DR: 1098--List of Home Branch Employees (5)

All of the Home Branch Employees are listed in the Office Procedures Manual. Make sure to check that the students have filled in their own information and have placed it in alphabetical order with the rest of the employees' information.

DR: 1111--Employees Listed by Departments (6)

Students are instructed to alphabetize employees by departments. They are to include their own position and name.

DR: 1123--Flyer (1)

Students are requested to prepare a one-page flyer from the information provided. They are to use their creativity. They are to take the flyer information from the handwritten material provided. Do not accept anything less. Make them do it again and again until it is acceptable. In a real office setting they would have to do it right or probably be fired. Provide them with access to graphics. Because of its creative nature, there is no answer key to this project.

DR: 1139--Form Letters and Envelopes to Branch Managers (8)

Students are requested to use the print merge feature of their word processing program to print a form letter and the envelopes to the three branch managers. They are instructed to use the new postal regulation format for the envelopes. This may mean that they will have to reformat the address list to make it into the postal format by changing to all capitals and deleting punctuation. They are to make corrections as they key in the letters. Students have also been requested to make copies of the flyer they prepared earlier to enclose with the letters.

DR: 1143--Revised Employees' Lists (9)

Students are requested to make changes in the Employees' Address List and in the Employees' Department List. Then they are to reprint each list on plain paper.

DR: 1148--I+tinerary (10)

Students have been prepared with a very extensive itinerary that contains a lot of corrections. Instruct them to print out the document and recheck to make sure they have made each correction. You may wish to vary the style of the itinerary. Supply students with a sample of the itinerary style you prefer.

DR: 1153--Memo to Branch Managers About New Cosmetic Line (7)

Students have been instructed to prepare a memo from Sales Supervisor. Make sure they use Mary Johnson as the supervisor and not Beverly Burns who has been promoted.

Additional ideas:

1. This simulation could be expanded by the teacher by using realistic forms for invoices, requisitions, and purchase orders constructed using other computer programs which produce graphics or forms.

2. On the following pages is a set of mailability standards that could be used to evaluate the activities. The suggested criteria are taken from the mailability standards set up in the Competitive Events Guidelines for Business Professionals of America.

Materials Needed:	**Equipment Needed:**
4 Letterheads	Computer
2 Memos	Printer
Blank paper	
Calendar	
Word processing software	

MAILABILITY STANDARDS

Using the following standards provides a more realistic attitude toward documents produced in the office. The use of P, M and U or M+, M, M- and NM tends to "wean" students away from the letter or number grade and helps them identify more with mailability standards in an office. Each teacher may want to establish his/her own points system based on levels of computer skills, time frame for introducing the simulation, and determination of importance of various documents. There can be a number of variations to these grading systems, but the ultimate idea is to have students begin thinking in terms of mailability rather than a number or letter grade.

One suggested scale is:

P = Perfect (100%)
M= Mailable (80%)
U = Unmailable (60%)

This scale has been modified in some instances to use only M for mailable (whatever passing percentage you want to use) or U for unmailable (whatever percentage you want to use as unmailable cutoff).

Another grading system is a graduated one:

M+ = Mailable, perfect
M = Mailable (with some minor errors) but could be mailed as is
M- = Mailable with corrections--need to make corrections before credit can be given
NM = Not mailable

The following are the criteria for levels of mailability.

M+ (Mailable, perfect--0 errors)

Receives maximum points allowed
All instructions are followed
Contains no uncorrected errors--misspellings, typographical errors, incorrect punctuation, incorrect capitalization, incorrect syllabication
Contains no omission in the body or opening and closing lines
Neatly completed with good placement of document on the page

M (Mailable with some minor errors that would not substantially change document)

All instructions followed
Less than ideal placement or spacing of document on the page
Omission or addition of word or words that do not change the meaning of the sentence
Not more than one correctable error
Omission of enclosure notation or reference initials
Acceptable but undesirable division of words
Acceptable but not most desirable use of capitalization or punctuation

M- (Mailable with corrections)

Instructions not followed
No more than three correctable errors
Omission or addition of word or words that change the meaning of a sentence
Obvious grammar errors not corrected
Essential punctuation violation

NM (Not mailable)

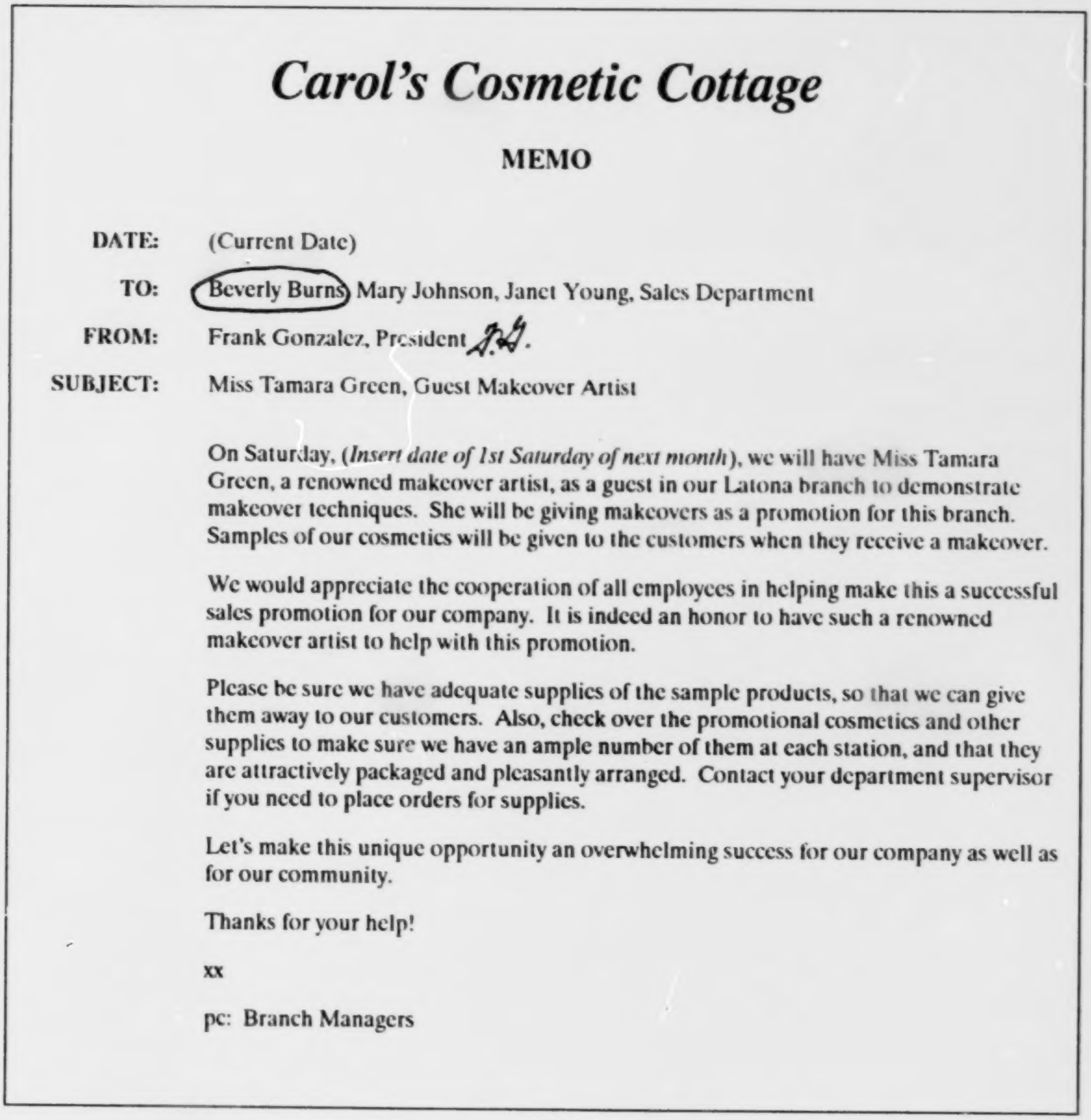
Instructions not followed
Totally incorrect placement or spacing of the document on the page
Four or more uncorrected keyboarding or spelling errors
Omission of a major part of the document, such as inside address, salutation, or dateline

ANSWERS

DR: 1123--Flyer

Evaluated to the satisfaction of the instructor. Creativity is very important.

DR: 1031--Sales Department Memo



Carol's Cosmetic Cottage

MEMO

DATE: (Current Date)

TO: Beverly Burns, Mary Johnson, Janet Young, Sales Department

FROM: Frank Gonzalez, President F.G.

SUBJECT: Miss Tamara Green, Guest Makeover Artist

On Saturday, (*Insert date of 1st Saturday of next month*), we will have Miss Tamara Green, a renowned makeover artist, as a guest in our Latona branch to demonstrate makeover techniques. She will be giving makeovers as a promotion for this branch. Samples of our cosmetics will be given to the customers when they receive a makeover.

We would appreciate the cooperation of all employees in helping make this a successful sales promotion for our company. It is indeed an honor to have such a renowned makeover artist to help with this promotion.

Please be sure we have adequate supplies of the sample products, so that we can give them away to our customers. Also, check over the promotional cosmetics and other supplies to make sure we have an ample number of them at each station, and that they are attractively packaged and pleasantly arranged. Contact your department supervisor if you need to place orders for supplies.

Let's make this unique opportunity an overwhelming success for our company as well as for our community.

Thanks for your help!

xx

pc: Branch Managers

DR: 1051--Letter to Miss Green

Carol's Cosmetic Cottage

1514 Main Street Mall
Latona, TX 72536-8792

(Current Date)

Miss Tamara Green, Beauty Consultant
Beautiful Face Incorporated
12549 Oliver Avenue
Dallas, TX 73246-8090

Dear Miss Green:

We are extremely pleased that you will be able to visit our company store next month. Your demonstrations will be very helpful and informative to our customers. We have advertised free makeovers for the first 50 customers on (*insert date of first Saturday of next month*), beginning at 9 a.m.

Thank you for offering to bring any advertising flyers or pamphlets you have on make-over tips to distribute to our customers. I know they will appreciate it.

Mrs. Maureen Akin, our personnel supervisor, will meet you at the airport Friday morning and take you to your hotel. We will have a reception and dinner Friday evening so that our board members, branch managers and supervisors will have an opportunity to meet you and discuss any questions they have.

We look forward to your exciting and informative visit.

Sincerely,

Mark Gonzalez

Mr. Frank Gonzalez, President

xx

DR: 1051--Envelope for Letter to Miss Green

Carol's Cosmetic Cottage
1514 Main Street Mall
Latona, TX 72536-8792

MS MARIANNE BARBER
5512 MERRYTIME DRIVE
KINGSFORD TX 78341-4252

DR: 1093--New Items Price List

Carol's Cosmetic Cottage

NEW ITEMS PRICE LIST

Effective November 30, 19--

Catalog No.	*Item	Price
43304	Shimmering Eyeliner	$ 3.50
43308	Marvel's Powder Eyeliner	4.75
65532	Lusterful Lip Gloss	3.50
26780	Wonderbrush Lip Brush	1.75
11156	Beautynow Assorted Cosmetic Brushes (set)	7.85
78875	Marvelous Face Highlighter Compact	4.35
33309	Zingy Eye Shadow, Palette of 6 Colors	8.85
12345	Wonder Woman Lipsticks	6.95
67893	Wonder Woman Foundation Make-up	6.95
08567	Wonder Woman Plain Powder Compacts	7.75
13245	Wonder Woman Loose Powder Compacts	10.95
88991	Wonder Woman Plain Loose Powder	9.95
45322	Wonder Woman Blemish Cover Sticks	2.95
67778	Wonder Woman Eyebrow Pencils	1.85
38829	Wonderful Man Deodorant	4.50
38830	Wonderful Man Tanning Lotion	3.75

*Available in assorted colors or shades.

DR: 1098--List of Home Branch Employees

Carol's Cosmetic Cottage

HOME BRANCH EMPLOYEES

Employee	Address	Phone No.
Maureen Akin	305 Bluebird Lane, Apt. 3	228-3111
Beverly Burns	12 LaCosta Lane	888-9876
Mark Caufman	One Halston Place	888-9496
Laura Friend	550 W. Highway	228-1515
Frank Gonzalez	4545 Contessa Road	228-6545
Mary Gonzalez	4545 Contessa Road	228-6545
Mary Johnson	1112 Dwayne Drive	735-8883
Jack Long	241 West Cidelia Apt. 4	None
Robert Martin	6732 East Coast Drive	877-4567
Juan Martinez	Coastal Apartments, Apt. 28	937-1122
Harold Smith	901 Bobbie Ann Lane	304-7852
Margaret Ann Smyth	3215 East 107 Street	723-4456
Edward Watkins	732 Main Place, Apt. 70	987-6543
Wanda Wiseman	8230 Mahaffey Lane	888-9828
Janet Young	411 Marietta Drive	735-2114
**Student's Name*	*Address*	*Phone No.*

**Student's Name and other information should be included within list in proper order.*

DR: 1111--Employees Listed by Departments--Sample

Carol's Cosmetic Cottage

HOME BRANCH EMPLOYEES

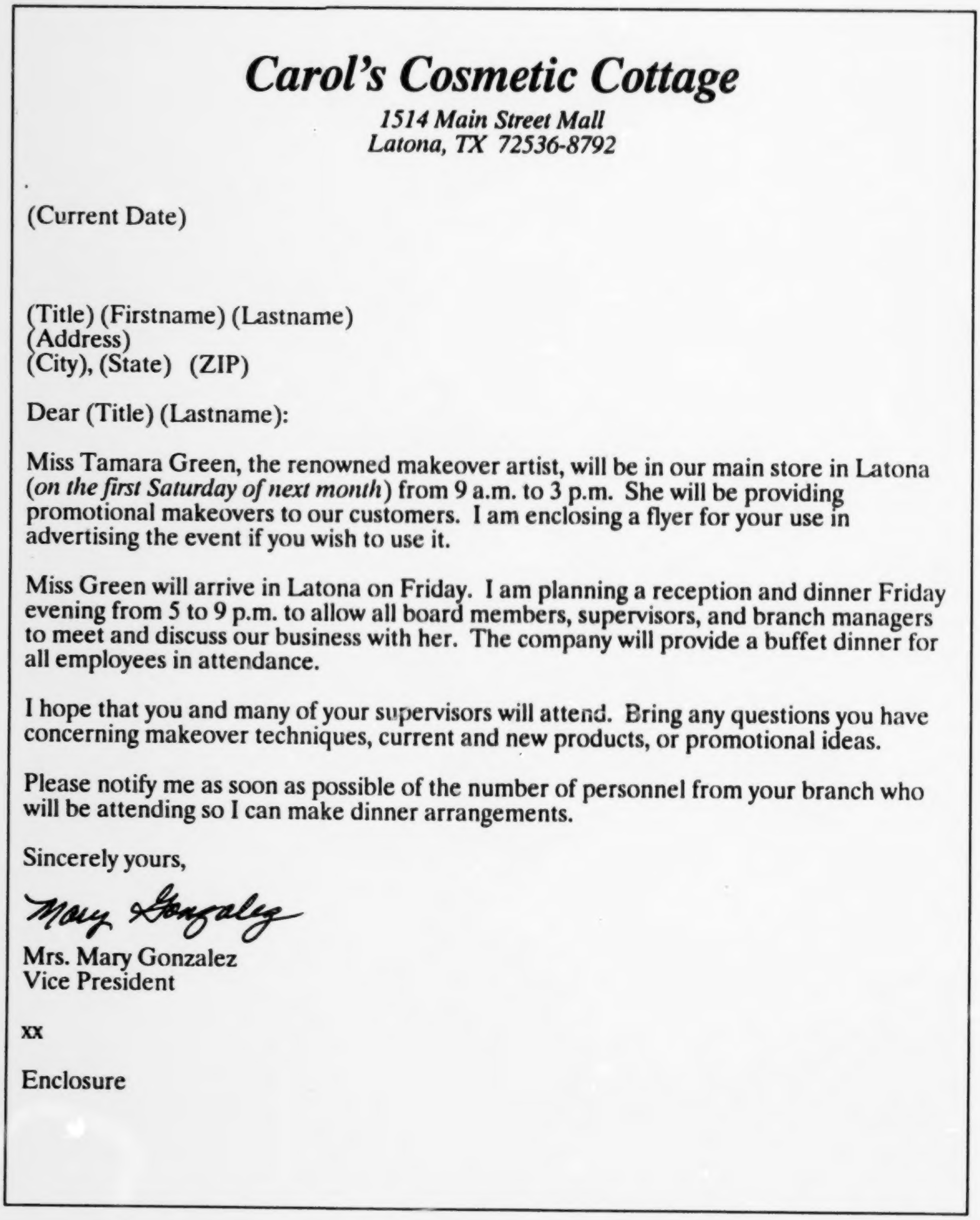
By Departments

Department	**Employee**
Administrative	
President	Frank Gonzalez
Vice President	Mary Gonzalez
Accounting Supervisor	Mark Caufman
Accounting Clerk	Edward Watkins
Information Processing Supervisor	Wanda Wiseman
Data Processor	Harold Smith
WP Specialist	*(Student's Name)*
Payroll Supervisor	Laura Friend
Payroll Clerk	Jack Long
Payroll Clerk	Margaret Ann Smyth
Personnel Supervisor	Maureen Akin
Sales Supervisor	Beverly Burns
Sales Clerk	Mary Johnson
Sales Clerk	Janet Young
Shipping Supervisor	Robert Martin
Shipping Clerk	Juan Martinez

DR: 1123--Flyer

Evaluated to the satisfaction of the instructor. Make the students redo it until it is correct.

DR: 1139--Form Letter to Branch Managers



Carol's Cosmetic Cottage
1514 Main Street Mall
Latona, TX 72536-8792

(Current Date)

(Title) (Firstname) (Lastname)
(Address)
(City), (State) (ZIP)

Dear (Title) (Lastname):

Miss Tamara Green, the renowned makeover artist, will be in our main store in Latona (*on the first Saturday of next month*) from 9 a.m. to 3 p.m. She will be providing promotional makeovers to our customers. I am enclosing a flyer for your use in advertising the event if you wish to use it.

Miss Green will arrive in Latona on Friday. I am planning a reception and dinner Friday evening from 5 to 9 p.m. to allow all board members, supervisors, and branch managers to meet and discuss our business with her. The company will provide a buffet dinner for all employees in attendance.

I hope that you and many of your supervisors will attend. Bring any questions you have concerning makeover techniques, current and new products, or promotional ideas.

Please notify me as soon as possible of the number of personnel from your branch who will be attending so I can make dinner arrangements.

Sincerely yours,

Mary Gonzalez

Mrs. Mary Gonzalez
Vice President

xx

Enclosure

DR: 1143--Revised Employees List

Carol's Cosmetic Cottage

HOME BRANCH EMPLOYEES

Employee	**Address**	**Phone No.**
Maureen Akin	1450 Lakeshore Avenue	228-3111
Beverly Burns	12 LaCosta Lane	888-9876
Mark Caufman	One Halston Place	888-9496
Mario Cruz	2112 Mastindale	786-6320
Laura Friend	550 West Highway	228-1515
Frank Gonzalez	4545 Contessa Road	228-6545
Mary Gonzalez	4545 Contessa Road	228-6545
LaDonna Huffman	217 Springdale Drive	None
Mary Johnson	1112 Dwayne Drive	735-8883
Jack Long	241 West Cidelia, Apt. 4	None
Robert Martin	6732 East Coast Drive	115-8787
Juan Martinez	Coastal Apartments, Apt. 28	937-1122
Harold Smith	901 Bobbie Ann Lane	304-7852
Edward Watkins	732 Main Place, Apt. 70	987-6543
Wanda Wiseman	8230 Mahaffey Lane	888-9828
**Student's Name*	*Address*	*Phone No.*

*Student's name and other information should be included within list in proper order.

DR: 1143--Revised List by Departments

Carol's Cosmetic Cottage

HOME BRANCH

By Departments

Department	Employee
Administrative	
President	Frank Gonzalez
Vice President	Mary Gonzalez
Administrative Assistant	Maureen Akin
Accounting Supervisor	Mark Caufman
Accounting Clerk	Edward Watkins
Information Processing Supervisor	Wanda Wiseman
Data Processor	Harold Smith
WP Specialist	*(Student's Name)*
Payroll Supervisor	Laura Friend
Payroll Clerk	Jack Long
Payroll Clerk	LaDonna Huffman
Personnel Supervisor	Beverly Burns
Sales Supervisor	Mary Johnson
Sales Clerk	Mario Cruz
Sales Clerk	Janet Young
Shipping Supervisor	Robert Martin
Shipping Clerk	Juan Martinez

DR: 1148--Itinerary

Carol's Cosmetic Cottage

ITINERARY

Mary Thompson

Sunday, November 11 - Friday, November 16, 19--

Sunday, November 11

9:05 p.m.	Arrive at Los Angeles International Airport. Reservation at the Hilton Hotel for two days.

Monday, November 12

7:00 a.m.	Breakfast at the Bagel Barn.
9:00 a.m.	Meeting with Beautiful Eyes Cosmetic Distributor to look over products.
11:00 a.m.	Meeting with Mrs. Mariana Elston at Lovely Cosmetic Salon to discuss advertisement in *Beauty Digest*.
12:00 noon	Lunch at The Wharf with Mr. Peter Carlson, Sales Representative of Cosmetics, Ltd.
2:00 p.m.	Meeting with Advertising Division of *Cosmetic World* to consider taking ads for five issues of *Cosmetic World*.
5:00 p.m.	Return to hotel and have dinner with my sister.

Tuesday, November 13

9:00 a.m. - 5:00 p.m.	Meet at La Contessa Hotel for Beauty Seminar. Lunch will be included with seminar.
6:00 p.m.	Meeting with Karla Donelson, Sales Representative for Beauty Bars, Inc. at The Steak Haven for dinner.
8:00 p.m.	Meeting with Maria DeVon, Beauty Consultant for Morris Department Stores to book seminar for Carol's Cosmetic Cottage.
10:00 p.m.	Return to the Hilton.

Itinerary (con't.)

Mary Thompson

Wednesday, November 14

9:00 a.m.	Depart the Hilton for LaCosta Inn for presentation to group of buyers about Carol's Cosmetic Cottage. Lunch at LaCosta with buyers.
1:00 p.m.	Depart LaCosta to proceed to Downtowner for demonstration of new make-up techniques with hands-on demonstrations.
5:00 p.m.	Depart Downtowner for Hilton.
5:30 p.m.	Dinner with my sister.
7:30 p.m.	Depart the Hilton for the L.A. International Airport.
8:30 p.m.	Depart on United Flight #55 for J.F.K. International Airport in New York.
10:30 p.m.	Arrive at J.F.K. International Airport. Reservations at Astor Hotel, 3212 N. 41st St., New York City. Telephone Number: (646) 982-8888.

Thursday, November 15

10:00 a.m. - 4:00 p.m.	Seminars at Astor Hotel with beauty representatives and consultants. Lunch at the hotel.
6:00 p.m.	Dinner at Astor Hotel.
8:00 p.m.	Attend Broadway show.

Friday, November 16

10:00 a.m.	Seminars with beauty representatives and consultants continue.
12:00 noon	Lunch at hotel.
1 p.m. - 4 p.m.	Continue seminars at Astor.
5:00 p.m.	Depart Astor Hotel for airport.
6:30 p.m.	Depart J.F.K. airport for Dallas on United Flight #512.
8:00 p.m.	Arrive in Dallas and drive to Latona.
10:00 p.m.	Arrive at Latona.

DR: 1153--Memo About New Cosmetic Line

Carol's Cosmetic Cottage

MEMO

DATE: (Current Date)

TO: LaDonne Cooke, Don Miller, Marianne Barber

FROM: Mary Thompson M.T.

SUBJECT: New Line of Cosmetics

Recently a new line of cosmetics has been added to our store stock. These items will be available to our customers starting next month. This memo is to inform you about this new line of products.

WONDER WOMAN cosmetics is a newly produced line of cosmetics that we will be handling in all of our branch stores. These cosmetics are hypoallergenic and come in a wide assortment of colors and shades.

We have chosen to start with a few of their products and expand our line as we see how the public responds to them. Each branch will receive trial samples and promotional materials about these products. Hand out these samples to selected customers with the evaluation form and have them provide feedback. These products are moderately priced. They have been on the market on the East Coast for about five years, and the sales representatives tell me they are selling like "wildfire" there.

WONDERFUL MAN cosmetics will also be available soon and we will begin handling this men's line in all our branches.

Keep our office informed on reactions to these products.

xx

DR: 1139--Envelopes for Form Letters

Carol's Cosmetic Cottage
1514 Main Street Mall
Latona, TX 72536-8792

MS MARIANNE BARBER
5512 MERRYTIME DRIVE
KINGSFORD TX 78341-4252

The letter on the preceding page should be sent to each of the following addresses:

MRS LADONNE COOK
4321 KINGSLEY LANE
HARRISVILLE TX 72115-2341

MS MARIANNE BARBER
5512 MERRYTIME DRIVE
KINGSFORD TX 78341-4252

MR DON MILLER
819 KELLER DRIVE
ASHFORD TX 73214-9324

Carol's Cosmetic Cottage

1514 Main Street Mall
Latona, TX 72536-8792

Carol's Cosmetic Cottage
1514 Main Street Mall
Latona, TX 72536-8792

Carol's Cosmetic Cottage

MEMO

DATE:

TO:

FROM:

SUBJECT:

EVALUATION SHEET

Date Completed	**Project**	**Grade**
____________	**DR: 1123--Flyer**	_____
Redo Y N Mailable Y N	_____ Originality/Creativity _____ Interest _____ Balance _____ Alignment _____ Proofread _____ Neatness	
Comments:		
____________	**DR: 1031--Sales Department Memo**	_____
Redo Y N Mailable Y N	_____ Correct Placement _____ Spelling Errors _____ Typographical Errors _____ Proofreading _____ Following Instructions	
Comments:		
____________	**DR: 1051--Letter to Miss Green and Envelope**	_____
Redo Y N Mailable Y N	_____ Correct Placement _____ Spelling Errors _____ Typographical Errors _____ Proofreading _____ Following Instructions _____ Envelope Prepared	
Comments:		

Student Name ______________________________ Class ____________

BIP/Simulations
Word Processing Evaluation Sheet

Date Completed	Project	Grade
________	**DR: 1093--New Items Price List**	______

Redo Y N

Mailable Y N

_____ Correct Format
_____ Spelling Errors
_____ Typographical Errors
_____ Following Instructions
_____ Proofreading

Comments:

Date Completed	Project	Grade
________	**DR: 1098--List of Home Branch Employees**	______

Redo Y N

Mailable Y N

_____ Correct Format
_____ Typographical Errors
_____ Proofreading
_____ Spelling Errors
_____ Following Instructions

Comments:

Date Completed	Project	Grade
________	**DR: 1111--Employees Listed by Departments**	______

Redo Y N

Mailable Y N

_____ Correct Format
_____ Typographical Errors
_____ Proofreading
_____ Spelling Errors
_____ Following Instructions

Comments:

Student Name ______________________________ Class ______________

Date Completed			**Project**	**Grade**
________			**DR: 1153--Memo About New Cosmetic Line**	______
Redo	Y	N	____ Good Format ____ Spelling Errors ____ Typographical Errors ____ Proofreading ____ Following Instructions	
Mailable	Y	N		
Comments:				
________			**DR: 1139--Form Letter to Branch Managers With Envelopes**	______
Redo	Y	N	____ Correct Placement ____ Spelling Errors ____ Typographical Errors ____ Proofreading ____ Following Instructions	
Mailable	Y	N		
Comments:				
________			**DR: 1143--Revised Employees List /Department List**	______
Redo	Y	N	____ All Revisions Made ____ Proofreading ____ Reprinted Both Lists	
Mailable	Y	N		
Comments:				

Student Name ______________________ Class ____________

Date Completed	**Project**	**Grade**
________________	**DR: 1148--Itinerary**	_______

Redo Y N

Mailable Y N

_____ Correct Format
_____ Spelling Errors
_____ Typographical Errors
_____ Proofreading
_____ Following Instructions

Comments:

Student Name ____ Class ________________

Carol's Cosmetic Cottage

Office Procedures
Manual

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PURPOSE

This Office Procedures Manual is as a useful aid for our department in producing various documents for our business. We have tried to standardize certain procedures and to include them in this manual so that time will not be wasted in finding out what procedures are desired for the documents of Carol's Cosmetic Cottage.

This manual is reviewed and updated annually, so each employee using this manual needs to review it periodically to be sure certain procedures have not changed.

NOTE:

The document examples are correct except they distort the correct amount of white space allotted for the margins of the documents. Generally an inch margin should be used. Check with your supervisor for further details about specific document margins.

FORMAT EXAMPLES

PROOFREADER'S MARK

‖	Align Copy	∧ ∨	Insert punctuation mark
¶	Begin new paragraph	?/	Insert question mark
〰	Bold	#	Insert space
Cap or ≡	Capitalize	lc or /	Lowercase letters
___	Change copy as indicated	⊔ ⊓ ⊏ ⊐	Move copy in direction of closed side of bracket
⁀‿	Close up horizontal space	QS >	Quadruple space
ℊ	Delete	?	Question the writer
DS >	Double space	no ¶	Run paragraphs together
stet or	Ignore correction	SS <	Single space
∧	Insert	(Sp)	Spell out word or number
V̇	Insert exclamation	∽	Transpose
⊼	Insert hyphen	TS >	Triple space
⊙	Insert period	___	Underline
← →	Center	Ital or ----	Italicize

Memo Format

Carol's Cosmetic Cottage

MEMO

DATE: (Use current date)

TO: Ms. Any Student

FROM: Wanda Wiseman, Secretarial Supervisor WW.

SUBJECT: Interoffice memo for Carol's Cosmetic Cottage

This is an example of the format for an interoffice memo for this company. The order in which the headings, Date, To, From, and Subject, is not important. The order in which they appear can vary. The colons following each heading should be aligned, one above the other as shown above.

A memo is not a letter. It is a document that is sent to individuals within the same business. It is in a less formal format than a business letter.

You may make your own headings on a piece of plain paper or you may use the interoffice memo form for the business. Either is acceptable in our business.

You will leave one blank line space between each heading, and two blank line spaces between the last heading and the body of the memo. There is no complimentary close on a memo; however, the word processing specialist does type his/her initials two lines below the last paragraph of the memo.

Usually the originator of the memo will initial the memo to the right of his/her name and title as above.

A memo is a quick, efficient way to communicate with employees in a business.

xx

STATE ABBREVIATIONS

Alabama	AL	Montana	MT
Alaska	AK	Nebraska	NE
Arizona	AZ	Nevada	NV
Arkansas	AR	New Hampshire	NH
California	CA	New Jersey	NJ
Canal Zone	CZ	New Mexico	NM
Colorado	CO	New York	NY
Connecticut	CT	North Carolina	NC
Delaware	DE	North Dakota	ND
District of Columbia	DC	Ohio	OH
Florida	FL	Oklahoma	OK
Georgia	GA	Oregon	OR
Hawaii	HI	Pennsylvania	PA
Idaho	ID	Puerto Rico	PR
Illinois	IL	Rhode Island	RI
Indiana	IN	South Carolina	SC
Iowa	IA	South Dakota	SD
Kansas	KS	Tennessee	TN
Kentucky	KY	Texas	TX
Louisiana	LA	Utah	UT
Maine	ME	Vermont	VT
Maryland	MD	Virginia	VA
Massachusetts	MA	Virgin Islands	VI
Michigan	MI	Washington	WA
Minnesota	MN	West Virginia	WV
Mississippi	MS	Wisconsin	WI
Missouri	MO	Wyoming	WY

Envelope Format

Carol's Cosmetic Cottage
1514 Main Street Mall
Latona, TX 72536-8792

JARDIN
5297 KELLY DRIVE
DALLAS TX 75123-7946

Sample Letter Format

Carol's Cosmetic Cottage

1514 Main Mall
Latona, TX 72536-8792

January 15, 19--

Mrs. LaDonne Cooke, Manager
5512 Merrytime Drive
Kingsford, TX 78341

Dear Mrs. Cooke:

This letter is a sample of the block style letter which is the preferred style of Carol's Cosmetic Cottage.

A block style letter is the fastest, most efficient style to use in producing a business letter. One characteristic of this letter style is that all lines begin at the left margin. Paragraphs are always blocked (not indented) and the dateline and closing lines also begin at the left margin. Using this style eliminates the time-consuming task of setting tabs for paragraphs, dateline, and closing lines.

Whether the letter is typed with or without letterhead the style is still the same. You should come down about 8 to 12 lines depending on how long the body of the letter is. It is up to the word processing specialist to "eye ball" the body of a letter before entering it, to determine how many lines should be left before and after the dateline.

Keying the company name in all capitals a double space below the complimentary close is no longer used. The number of lines left between the name of the writer and the complimentary closing is determined by the size of the signature of the writer. The larger the signature, the more space to be left. The smaller the signature, the less space to be left. However, there should be no fewer than three blank lines left for the writer to sign.

Be sure to include your initials for the reference initials. If the letter refers to an enclosure, please be sure to include this notation, too. If other people are to receive copies of this letter, then be sure to include an appropriate copy notation.

Sincerely yours,

Wanda Wiseman

Mrs. Wanda Wiseman, Supervisor
Secretarial Department

xx

Enclosures

pc Mary Gonzales

Sample Itinerary

Carol's Cosmetic Cottage

ITINERARY

Beverly Burns

Monday, May 6 - Saturday, May 11, 19--

Monday, May 6

7:30	**p.m.**	Arrive at Stapleton International Airport. Reservation at the Brown Palace Hotel for two days.

Tuesday, May 7

7:00	**a.m.**	Breakfast at the Le Peep.
8:30	**a.m.**	Meeting with Beautiful Eyes Cosmetic Distributor to look over products.
10:30	**a.m.**	Meeting with Mrs. Jane Emerson at Lovely Cosmetic Salon to discuss advertisement in *Beauty Digest*.
12:00	**noon**	Lunch at The Pelican Club with Mr. Peter Carlson, Sales Representative of Cosmetics, Ltd.
1:30	**p.m.**	Meeting with Advertising Division of *Cosmetic World* to consider taking ads for five issues of *Cosmetic World*.
5:00	**p.m.**	Return to hotel and have dinner with my niece.

Wednesday, May 8

9:00 **4:00**	**a.m.** **p.m.**	Meet at Convention Center for Beauty Seminar. Lunch will be included with seminar.
4:30	**p.m.**	Meeting with Shawna McGrath, Sales Representative for Beauty Bars, Inc. at The Normandy Restaurant for dinner.
6:30	**p.m.**	Depart Stapleton International Airport for Dallas on Continental Flight #416.
9:30	**p.m.**	Arrive in Dallas and drive to Latona.
11:30	**p.m.**	Arrive at Latona.

Carol's Cosmetic Cottage

EMPLOYEE INFORMATION

MAIN BRANCH

Administration	
President	Frank Gonzalez 4545 Contessa Road (113) 228-6545
Vice President	Mary Gonzalez 4545 Contessa Road (113) 228-6545
Accounting Supervisor	Mark Caufman One Halston Place (113) 888-9496
Accounting Clerk	Edward Watkins 732 Main Place, Apt. 70 (113) 987-6543
Information Proccessing Supervisor	Wanda Wiseman 8230 Mahaffey Lane (113) 888-9828
Data Processing	Harold Smith 901 Bobbie Ann Lane (113) 304-7852
Word Processing Specialist	*Student's name* *Address* *Phone No.*
Payroll Supervisor	Laura Friend 550 West Highway (113) 228-1515
Payroll Clerks	Margaret Ann Smyth 3215 East 107 Street (113) 723-4456
	Jack Long 241 West Cidelia, Apt. 4 (No phone)

Carol's Cosmetic Cottage

EMPLOYEE INFORMATION

MAIN BRANCH (con't.)

Personnel Supervisor	Maureen Akin 305 Bluebird Lane, Apt. 3 (113) 228-3111
Sales Supervisor	Beverly Burns 12 LaCosta Lane (113) 888-9876
Sales Clerks	Janet Young 411 Marietta Drive (113) 735-8883
	Mary Johnson 1112 Dwayne Drive (113) 735-8883
Shipping Supervisor	Robert Martin 6732 East Coast Drive (113) 877-4567
Shipping Clerk	Juan Martinez Coastal Apartments, Apt. 28 (113) 937-1122

Latona, TX 72536-8792

Carol's Cosmetic Cottage

BRANCH OFFICE ADDRESSES

KINGSFORD

Mrs. LaDonne Cooke, Manager
5512 Merrytime Drive
Kingsford, TX 78341-4252

ASHFORD

Mr. Don Miller, Manager
819 Keeler Drive
Ashford, TX 73214-9324

HARRISVILLE

Ms. Marianne Barber, Manager
4321 Kingsley Lane
Harrisville, TX 72115-2341

CAROL'S
COSMETIC
COTTAGE

Congratulations! Welcome to Carol's Cosmetic Cottage.

You have been hired as a word processing specialist at Carol's Cosmetic Cottage (CCC). Your job as word processing specialist is to receive rough draft documents from the supervisors of various departments within the company, prioritize them, and then process them. You are expected to correct grammar, spelling, and formatting errors you find. Your immediate supervisor is Wanda Wiseman, but you may be preparing documents for all supervisors in every department.

Please familiarize yourself with the *Office Procedures Manual*. It will answer most of your questions concerning style, format, state abbreviations and general expectations of the company in reference to its documents. It was designed as a tool to provide guidelines for uniform production of documents for all branches of the company.

Welcome to the cosmetic industry--a national multibillion-dollar-a-year business. Carol's Cosmetic Cottage is a small locally owned business composed of 16 employees in the main branch located in Latona, Texas.

Latona is a town of about 100,000 population in an industrial area of Texas. It has several large industries and is an affluent town with five elementary schools, two junior high schools, three large high schools, and a junior college within the city limits. Unemployment is relatively low, and the population is composed mainly of middle- to upper-income families.

Carol's Cosmetic Cottage has been in business about five years and does a thriving business with its mall location and its close proximity to other towns of equal size. There are three branch offices of Carol's Cosmetic Cottage around the state, but this Latona location is the home office for the business. The home office is where hiring is done, and the payroll is compiled for all the branches.

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Carol's Cosmetic Cottage

Document Request Form 1031

From the desk of Wanda Wiseman

Department Information Processing

Document Name Sales Dept. Memo File Name SALESMEM

Date Needed Today Store for future use: [✓ YES] NO

Type of Project

___ Letter ✓ Memo ___ Report ___ Other

Formatting Instructions Use the memo format in Carol's Office Procedures Manual and our memo heading paper.

Printing Instructions

___ Plain Paper ___ Letterhead ✓ Memo Heading ___ Other

1 No. of Copies ___ Final Copy ___ Landscape ___ Portrait

Special Instructions

Enter the following memo from Mr. Gonzales to the Sales Department (list all names of department members). Use today's date. Make a photo copy for each of the branch managers and for other department staff. Circle the name of receiver when appropriate.

Use the subject line -- Miss Tamara Green, guest makeover artist.

On Saturday, (*Insert date of 1st Saturday of next month*), we will have Miss Tamara Green, a renowned make-~~up~~ over artist in the Southwest, as a guest in our Latona branch to demonstrate make~~up~~ over techniques. She will be giving makeovers as a promotion for this branch. Samples of our cosmetics will be given to the customers when they receive a makeover.

We would appreciate the cooperation of all employees in helping make this a successful sales promotion for our company. It's indeed an honor to have a renowned make~~up~~ over artist to help with ~~our~~ this sales promotion.

Please be sure we have ~~enough~~ adequate supplies ~~and~~ of the sample products, so that we can give them away to our customers. ~~Please~~ Also, check over the promotional cosmetics and other supplies~~.~~ to ~~M~~ make sure ~~you~~ we have an ~~adequate~~ ample number of them at ~~your~~ each station and that they ~~are arranged pleasantly and packaged attractively~~. attractively packaged and pleasantly arranged.

~~Please~~ contact your department supervisor ~~or the shipping department~~ if you need to place orders for supplies.

Let's make this ~~unusual~~ unique opportunity a n overwhelming success for our company as well as for our community.

Thanks for your help!

Carol's Cosmetic Cottage

Document Request Form 1051

From the desk of Wanda Wiseman

Department Information Processing

Document Name Letter to T. Green File Name GREENL

Date Needed Today Store for future use: [✓ YES] NO

Type of Project

✓ Letter ___ Memo ___ Report ___ Other

Formatting Instructions Key the attached letter for Mr. Gonzales, using the letter format found in the Office Procedures Manual.

Printing Instructions

___ Plain Paper ✓ Letterhead ___ Memo Heading ✓ Other envelope

___ No. of Copies ___ Final Copy ___ Landscape ___ Portrait

Special Instructions

Address the letter and envelope to:

Miss Tamara Green, Beauty Consultant
Beautiful Face, Inc.
12549 Oliver Avenue
Dallas, TX 73246-8090

We are extremely pleased that you will be able to ~~fit our~~ visit our company store, ~~into your busy~~ stet, ~~schedule next month~~. Your demonstrations will be ~~most~~ very helpful and informative, ~~to~~ for our customers. We have advertised free makeovers for the first ~~fifty~~ 50 customers on (*insert date of first Saturday of next month*), beginning at 9:~~00~~ a.m.

Thank you for offering to bring any advertising flyers or pamphlets you have on make-over tips to distribute to our customers. I know they will ~~apreciate~~ appreciate it.

Mrs. Maureen Akin, our personnel supervisor, will meet you at the airport Friday morning and take you to your hotel. We will have a reception and dinner Friday evening, so that our board members, branch managers and supervisors will have an opportunity to meet you and discuss any questions they have.

We look forward to your exciting and informative visit.

Supply appropriate
salutation and use our
standard closing lines.
Thanks!
J.G.

Carol's Cosmetic Cottage

Document Request Form 1093

From the desk of Mary Thompson

Department Sales Department

Document Name New Items Price List File Name CURPRICE

Date Needed Tomorrow Store for future use: [✓ YES] NO

Type of Project

___ Letter ___ Memo ✓ Report ___ Other

Formatting Instructions Prepare an attractive tabular set up of the attached information. Provide proper headings for price table as well as column heading.

Printing Instructions

✓ Plain Paper ___ Letterhead ___ Memo Heading ___ Other

___ No. of Copies ___ Final Copy ___ Landscape ___ Portrait

Special Instructions

Use November 30, 19-- as the effective date for these retail prices.

← CCC →

← NEW ITEMS PRICE LIST →

← Effective Nov. 30, 19-- →

Catalog # 43304 Shimmering Eyeliner, ~~assorted colors~~, $3.50 ~~each~~

Catalog # 43308 Marvel's Powder Eyeliner, ~~assorted colors~~, $4.75 each

Catalog # 65532 Lusterful Lip Gloss, ~~assorted colors~~, $3.50 ~~each~~

Catalog # 26780 Wonderbrush Lip Brush, $1.75 each

Catalog # 11156 Beautynow assorted Cosmetic brushes, 7.85 set

Catalog # 78875 Marvelous Face highlighter compact, $4.35 ~~each~~

Catalog # 33309 Palette of 6 ~~assorted~~ colors Zingy Eye Shadows, $8.85

Catalog # 12345 Wonder Woman Lipsticks, ~~assorted colors~~, $6.95

6.95

Catalog # 67893 Wonder Woman Foundation Make-up, ~~assorted shades~~, ~~$9.85~~

Plain

Catalog # 08567 Wonder Woman Powder compacts, plain case, assorted shades, $7.75

loose

Catalog # 12345 Wonder Woman Powder compacts, ~~ornate, for loose powder~~, ~~assorted shades~~, $10.95

Plain

Catalog # 88991 Wonder Woman loose powder, ~~assorted shades~~, $9.95

Catalog 45322 Wonder Woman blemish cover sticks, assorted shades, $2.95

Catalog # 67778 Wonder Woman eyebrow pencils, ~~brown or black~~, $1.85

* Items are available in a variety of assorted colors and shades. stet

Add the following men's items to the end of the list.

Cat. #38829 Wonderful Man Deodorant $4.50
Cat. #38830 Wonderful Man Tanning Lotion $3.75

Carol's Cosmetic Cottage

Document Request Form 1098

From the desk of Laura Friend
Department Payroll
Document Name Home Branch Emp. File Name EMPLOYEE
Date Needed Tomorrow Store for future use: [✓ YES] NO

Type of Project

___ Letter ___ Memo ___ Report Table Other

Formatting Instructions Double space the list. Set it up in columns. Center the following title in two lines:
Carol's Cosmetic Cottage Home Branch
Employees

Printing Instructions

✓ Plain Paper ___ Letterhead ___ Memo Heading ___ Other
___ No. of Copies ___ Final Copy ___ Landscape ___ Portrait

Special Instructions

Prepare an alphabetical list of our Home Branch employees. Refer to the Office Procedures Manual for employee information. Include the employee's name, street address and telephone number.

Be sure to include your own name and other necessary information.

Carol's Cosmetic Cottage

Document Request Form 1111

From the desk of Maureen Akin

Department Personnel

Document Name Home Branch Employees by Department File Name DEPTLIST

Date Needed Tomorrow Store for future use: [✓ YES] NO

Type of Project

____ Letter ____ Memo ____ Report table Other

Formatting Instructions Use the same first 2 lines of the heading on the table for Laura. Add a third line -- by Departments. Use two column headings -- Department + Employee.

Printing Instructions

✓ Plain Paper ____ Letterhead ____ Memo Heading ____ Other

1 No. of Copies ____ Final Copy ____ Landscape ____ Portrait

Special Instructions

List the employees by departments and alphabetize within each department.

Make sure to include your own positions.

Carol's Cosmetic Cottage

Document Request Form 1123

From the desk of Wenda Wiseman

Department Information Processing

Document Name Flyer File Name GRFLYER

Date Needed Yesterday! Store for future use: [✓ YES] NO

Type of Project

___ Letter ___ Memo ___ Report Flyer Other

Formatting Instructions Prepare a one-page flyer from the attached information. Use various fonts, styles, and graphics to make it a sharp, eye-catcher.

Printing Instructions

✓ Plain Paper ___ Letterhead ___ Memo Heading ___ Other

✓ No. of Copies ___ Final Copy ___ Landscape ✓ Portrait

Special Instructions

This flyer will go to all our regular customers. I know they will be escited about Miss Green's visit

Use your creativity!!!

Carol's Cosmetic Cottage is proud to announce the visit of Miss Tamara Green, renowned makeover artist at our Latona branch (Insert date of first Sat. of next month) beginning at 9 a.m. There will be prizes, drawings, and gifts for the *first* 100 customers!

Miss Green will give free makeovers to the first 50 customers. We hope to see you there!

Carol's Cosmetic Cottage

Document Request Form 1139

From the desk of Mary Gonzales
Department Administration
Document Name Br. Mgr. Form Letter LG. File Name BRMGTGL
Date Needed ASAP Store for future use: [✓ YES] NO

Type of Project

✓ Letter ___ Memo ___ Report envelope Other

Formatting Instructions Use print merge feature for Name, Address, City, State and ZIP

Printing Instructions

___ Plain Paper ✓ Letterhead ___ Memo Heading ✓ Other envelopes
3 No. of Copies ___ Final Copy ___ Landscape ___ Portrait

Special Instructions

Make corrections as you enter this letter. Refer to your Office Procedures Manual for proper format.

Be sure to make photocopies of the flyer and enclose it with the letters.

Current date
(Use name of manager and address of each branch)

Dear :

Miss Tamara Green, the renowned make~~up~~over artist, will be in our main store in Latona (*on the first Saturday of next month*) from 9~~:00~~ a.m. to 3~~:00~~ p.m. She will be providing promotional makeovers to our customers.

~~She~~ Miss Green will arrive in Latona on Friday. ~~We are~~ I am planning a reception and dinner Friday evening from 5~~:00~~ to 9~~:00~~ p.m. to allow all board members, supervisors, and branch managers to meet and discuss our business with her. ~~We will~~ Staff provide a buffet dinner for all employees in attendance.

~~We would very much appreciate you and as many of your supervisors who can attend to do so.~~ I hope that you and many of your supervisors will attend. Bring any questions you have concerning make~~up~~over techniques, current and new products, or promotional ideas ~~you have~~.

Please notify me as soon as possible of the number of personnel from your branch who will be attending so ~~we~~ I can make dinner arrangements.

Sincerely~~,~~ yours,

P.S. I am enclosing a flyer for your use in advertising the event if you wish to use it.

Carol's Cosmetic Cottage

Document Request Form 1143

From the desk of Wanda Wiseman
Department Information Processing
Document Name Revised Employee Address List File Name EMPLOYEE + DEPT
Date Needed Today Store for future use: [✓ YES] NO

Type of Project

___ Letter ___ Memo ___ Report Table Other

Formatting Instructions Retrieve your files and make the changes indicated on the attached page.

Printing Instructions

✓ Plain Paper ___ Letterhead ___ Memo Heading ___ Other
2ea. No. of Copies ___ Final Copy ___ Landscape ___ Portrait

Special Instructions

Send a copy of the updated Home Branch Employee List and the Home Branch Employees listed by departments to personnel and to payroll.

1. *Janet Young and Margaret Ann Smith have found new jobs, so please delete them from our employee rolls.*

2. *Mario Cruz of 2112 Martindale, phone #(113) 786-6320 will replace Janet Young and LaDonna Huffman will replace Margaret Ann Smith. Ms. Huffman lives at 217 Springdale Dr. She has no phone.*

3. *Mr. Robert Martin has changed his phone # to (113) 115-8787.*

4. *Beverly Burns was promoted to the Supervisor of the Personnel Department.*

5. *Maureen Akin has moved to 1450 Lakeshore Avenue and was promoted to Administrative Assistant to the President.*

6. *Mary Johnson was promoted to Supervisor of the Sales Department.*

Carol's Cosmetic Cottage

Document Request Form 1148

From the desk of Mary Johnson

Department Sales

Document Name Itinerary File Name Itinerla

Date Needed Next week Store for future use: [✓ YES] NO

Type of Project

___ Letter ___ Memo ___ Report Itinerary Other

Formatting Instructions Set up best way -- neat, easy to read. See sample in procedures manual.

Printing Instructions

X Plain Paper ___ Letterhead ___ Memo Heading ___ Other

1 No. of Copies ___ Final Copy ___ Landscape X Portrait

Special Instructions

After you print this out I will edit it again to fine-tune it.

Thanks

Sunday, November 11, 19--

~~I will~~ arrive at Los Angeles International Airport at 9:05 p.m. ~~I~~ reservation at the ~~LA~~ Hilton for 2 days.

Monday, November 12, 19----~~Los Angles California~~ ~~I will have~~ breakfast at 7 a.m. at the Bagel Barn and will have a 9 a.m. meeting with Beautiful Eyes Cosmetic Distributor to look over products.

At 11:00 a.m. ~~I will~~ meet ing with Mrs. Mariana Elston at Lovely Cosmetic Salon to discuss our advertisement in BEAUTY DIGEST.

12:00 NOON--Lunch at the Wharf with Mr. Peter Carlson, Sales Rep of Cosmetics, Ltd.

2:00 p.m.--Meeting with Advertising Division of Cosmetic World to consider taking ads for five issues of COSMETIC WORLD.

5:00 p.m--Return to hotel and have dine n with my sister.

Tuesday, November 13, 19-- - 9:00 a.m. to 5:00 p.m. Meet at ~~LA~~ Contessa Hotel for Beauty Seminar. Lunch ~~will be~~ included with seminar.

I will depart for my hotel (LA Hilton) at 5 p.m. At 6 p.m. meeting with Karla Donelson, Sales Representative for Beauty Bars, Inc. at The Steak Haven for dinner ~~supper~~. At 8 p.m. meeting with Maria DeVon, Beauty Consultant for Morris Department Stores to book seminar for CCC. ~~I will~~ return to Hilton ~~my hotel~~ about 10 p.m.

~~On~~ Wednesday, November 14, 19--, I will depart Los Angels Hilton at 9 a.m. for LaCosta Inn for presentation to group of buyers about CCC. ~~I will eat~~ lunch with the buyers at the LaCosta. At 1 p.m. ~~I will~~ depart LaCosta to proceed to the Downtowner for a demo of new makeup techniques with hands-on demonstrations. ~~I will~~ depart Downtowner at 5 p.m. for my hotel where I will meet my sister at 5:30 p.m. for dinner. At 7:30 p.m. ~~I will~~ depart the ~~L.A.~~ Hilton for L.A. International Airport to fly to New York, and I will depart ~~L.A.~~ International Airport at 8:30 p.m. on United flight #55 for New York National J.F.K. International Airport. 10:30 p.m. ~~I will~~ arrive at J.F.K. International Airport. ~~I have a~~ reservation s at the ~~N.Y.~~ Astor Hotel, 3212 N. 41st St. New York City, ~~N.Y.~~, Phone # (646)982-8888.

11/15/-- --10 a.m. to 4 p.m. - Seminars at Astor Hotel with Beauty Representatives and Consultants. Lunch at hotel. 6 p.m. ~~Supper~~ Dinner at Hotel. 8 p.m. Broadway Show.

11/16/-- --10 a.m. - Seminars at Astor Hotel with beauty representatives and consultants continue. 12 noon lunch at hotel. 1-4 p.m. continue seminars at Astor. ~~6~~ 5 p.m. - Depart Astor Hotel for airport and arrive at 6:30 p.m. at airport to depart United flight #512 to Dallas. Arrive Dallas at 8 p.m., rent car to drive to Latona. 10 p.m. Arrive at Latona.

Heading -

Carol's Cosmetic Cottage

ITINERARY

Mary Johnson

Second page: ← Itinerary (con't.) →
Mary Thompson

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Carol's Cosmetic Cottage

Document Request Form 1153

From the desk of Wanda Wiseman
Department Information Processing
Document Name New Cosmetic Line File Name WWCOSM
Date Needed Tomorrow Store for future use: [✓ YES] NO

Type of Project

___ Letter ✓ Memo ___ Report ___ Other

Formatting Instructions Use standard memo format! Proofread carefully.

Single space; double space between headings

Printing Instructions

___ Plain Paper ___ Letterhead X Memo Heading ___ Other
3 No. of Copies ___ Final Copy ___ Landscape X Portrait

Special Instructions

Send to our Branch Mgrs.

Spell check. Send it from Mary Johnson in our Sales Department

A new line of cosmetics has been recently added to our store stock. These items with some backup information concerning will be available to our customers starting next month. The purpose of this memo is to inform you about this new line of products.

WONDER WOMAN cosmetics is ~~are~~ a newly produced line of cosmetics that we will be handling in all of our branch stores. These cosmetics are hypoallergenic and come in a wide assortment of colors and shades.

We have chosen to start ~~out~~ with a few of their products and expand our line as we see how the public responds to them. Each branch will receive trial samples and promo materials on these products. Hand out these samples to selected customers with the evaluation form and have them provide feedback as to their results. These products are moderately priced. They have been on the market on the East Coast for about five years, and the sales rep tell~~s~~ me they are selling like "wildfire" there.

Keep our office informed on as to the reactions to these products.

WONDERFUL MAN cosmetics will also be available soon and we will begin handling this men's line in all our branches.

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Business Information Processing

Records Management

Simulation

INSTRUCTIONS

This is a simulation prepared for Section V, Units 1 and 2 of the *Business Information Processing Curriculum*. The simulation should be completed after the study of the reference materials in **Section V: Information Management**. Students should have studied and completed all written work for **Unit 1--Records Management and Unit 2--Database Management**. The competency tests following these units should determine whether or not the students are ready for the hands-on simulation.

Both manual and electronic filing activities have been included in this simulation. Therefore, it is assumed that you have spent the time to acquaint the students with ARMA filing rules, the computer, and the database software they will use.

This simulation contains the following record management activities:

- Alphabetic File for New Individual Subscribers--Manual
- Alphabetic File for New Business Subscribers--Manual
- Subject Filing--Manual
- Memo Incorporating Database Information
- Databases--Individual and Business Subscribers
- Preparation of Outguide
- Database Subject File

SPECIFIC INSTRUCTIONS

Alphabetic File for New Individual Subscribers--Manual

Students are to index and alphabetize the individual subscriptions that have been received in the morning mail. Make scissors available for the students to cut the subscriptions apart. You may wish to provide students with a paper clip and a #10 envelope in which to place the subscriptions to keep them separate from the new business subscriptions.

Alphabetic File for New Business Subscribers--Manual

Students are to index and alphabetize the business subscriptions that have been received in the morning mail. Make scissors available for the students to cut the subscriptions apart. You may wish to provide students with a paper clip and a #10 envelope in which to place the subscriptions to keep them separate from the new individual subscriptions.

Subject Filing--Manual

There are no brochures and catalogs included in this activity--only the titles. Students are to take the list of brochures and catalogs provided and categorize them according to the subject categories found in the Subject File Index in the *Office Procedures Manual*. A suggested format is shown in the answers. However, students may wish to organize it differently.

Database of Individual and Business Subscribers

Students are to create a database of individual and business subscribers and one of business subscribers. They should then print out an alphabetical listing of each one.

Memo Incorporating Database Information

Memo should be in proper memo format using correct grammar and punctuation. Students should verify they have provided the shipping department with the correct names and addresses of the paid subscribers.

Outguide

Students are requested to prepare an Outguide because they are supposedly charging out some information from the file.

List of Individual/Business Subscribers in the Pacific Region

Students are requested to prepare a listing of the individual and business subscribers in the Pacific Region.

Telephone Message

Students are requested to take down the information from the phone call.

Database Subject File

Students are requested to prepare a listing of all individual and business subscribers located in the Pacific Region. If your database program will not allow them to combine the names, have students print out a separate listing of the individual and business subscribers.

Materials Needed:

Brochures from local travel agency
Yearly calendar
Ski magazines
Database software
Two #10 envelopes
Paper clips

Equipment Needed:

Computer
Printer

ANSWERS

Alphabetic File for New Individual Subscribers--Manual

John C. Anthony

Richard Beacon

Geo. Carmichael

Jenny Carpenter

Herb A. Carter

Thomas DeMarco

John A. Evans
341 S *Northern* Avenue
Pleasanton, *CA* 94567

John A. Evans
325 *Robin* Road
Pleasanton, *CA* 94567

John A. Evans
St. Louis, *MO* 65320

Marie Mac Arthur

John Nichols

Jesse North

Charles A. Wilson

Randall Wilson

Alphabetic File for New Business Subscribers--Manual

Anchor Inn Marina & Resort

Bank One of Texas

Brenda's Style Shop

Chamber of Commerce

Country Optical

Craig Goodman, M.D.

East-West Tours

Elite Ski School

Family Vision Center

Howard Kweller, M.D.

KIKA Radio

North East Travel Agency

O'Connell Sports Center

Ocular Diagnostic Associates

United Travel

Walnut Cove Yacht Club

Subject File--Manual

SKI EQUIPMENT

Skis	Atomic Dynaster Fisher	K2 Kneissel	Oline Salomon
Bindings	ESS Look	Nordica Salomon	Tyrolia
Poles	Elan Head	Lange Olin	Technic Tyrolia
Boots	Koflach Nordica	Raichle Salomon	Technic

SKI APPAREL

Skiwear	Degre7 Fera Gerry	Nils North Face Stag	Technic
Footwear	Kaufman	Lange	Winterheat

SKI ACCESSORIES

Gloves	Europa Gates-Mill	Hotspot Seirus	Woolrich
Goggles	Dupont Head	Serengeti Smith Sport	

Database List of Individual Subscribers

NAME	STREET	CITY	STATE	ZIP
John C. Anthony	34 East Park	Bel Air	MD	21024
Richard Beacon	456 Hillcrest	Denver	CO	80223
George Carmichael	1500 Technology	Sunnyvale	CA	95160
Jenny Carpenter	431 Sunhill	Greenville	TX	75402
Herb A. Carter	37 Melody Lane	Omaha	NE	68695
Thomas De Marco	P.O. Box 2377	Stowe	VT	05674
John A. Evans	3415 Northern	Pleasanton	CA	94567
John A. Evans	325 Robin Road	Pleasanton	CA	94567
John A. Evans	1688 Nashville	St. Louis	MO	65320
Marie Mac Arthur	8180 Star Avenue	Chico	CA	95962
John Nichols	1428 Washington	Durango	CO	80254
Jesse North	14 Colony Drive	Lincoln	NE	68601
Charles A. Wilson	4513 Story Drive	Oyster Bay	MA	02786
Randall Wilson	332 Story Drive	Oyster Bay	MA	02786

Database List of Business Subscribers

NAME	STREET	CITY	STATE	ZIP
Anchor Inn Marina & Resort	110 Manhattan Drive	Miami	FL	33101
Bank One of Texas	119 N Roselane	Houston	TX	77325
Brenda's Style Shop	5690 Eastland Ave.	Baton Rouge	LA	70801
Chamber of Commerce	436 Wesley Street	Baton Rouge	LA	70801
Country Optical	1400 Pine Road	Portland	OR	97201
Craig Goodman, M.D.	4237 Semple Street	San Jose	CA	97862
East-West Tours	8009 Johnson Drive	San Francisco	CA	94116
Elite Ski School	110 Edgewood Drive	Vail	CO	80260
Family Vision Center	3410 Story Drive	Austin	TX	76510
Howard Kweller, M.D.	13 Hostettler Road	San Jose	CA	97862
KIKA Radio	3400 Wolfe City Dr.	Reno	NV	89501
North East Travel Agency	8919 Parkland	Dallas	TX	74528
O'Connell Sports Center	115 Ski Drive	Aspen	CO	81611
Ocular Diagnostic Assoc.	3302 Stonewall	San Francisco	CA	94116
United Travel	1300 Fountain Ave.	Spokane	WA	99186
Walnut Cove Yacht Club	3286 Broadway	Tampa	FL	33601

Memo to Shipping Department Incorporating Database Information

SKI--On The Edge

MEMO

DATE: (Current Date)

TO: Shipping Department

FROM: Central Filing Department

SUBJECT: Fanny Pack Subscribers

The following individual and business subscribers should receive the Ski Fanny Pack.

Thomas De Marco	P.O. Box 2377	Stowe	VT	05674
John A. Evans	3415 Northern	Pleasanton	CA	94567
Charles A. Wilson	4513 Story Drive	Oyster Bay	MA	02786
Anchor Inn Marina & Resort	110 Manhattan Drive	Miami	FL	33101
Bank One of Texas	119 North Roselane	Houston	TX	77325
East-West Tours	8009 Johnson Drive	San Francisco	CA	94116
Howard Kweller, MD	13 Hostettler Road	San Jose	CA	97862
Walnut Cove Yacht Club	3286 Broadway	Tampa	FL	33601

We are receiving several paid new subscriptions, so you might want to check your supply of the SKI FANNY PACKS. We have received many compliments on the packs.

Thank you for making sure the fanny packs are delivered on time.

xxx

Outguide

Ski - On The Edge

OUT

Follow-up date ____________________

Salomon Product File
Name or subject

Sally Jones
Signature or name of borrower

Advertising
Department

(Current Date)
Date borrowed

List of Individual/Business Subscribers in the Pacific Region

INDIVIDUAL SUBSCRIBERS

Name	Street	City	State	ZIP	Amt. Due	Amt. Paid
George Carmichael	1500 Technology	Sunnyvale	CA	95160	12.10	
John A. Evans	3415 Northern	Pleasanton	CA	94567	21.31	
John A. Evans	325 Robin Road	Pleasanton	CA	94567	12.10	12.10
Marie Mac Arthur	8180 Star Avenue	Chico	CA	95962	12.10	

BUSINESS SUBSCRIBERS

Name	Street	City	State	ZIP	Amt. Due	Amt. Paid
Country Optical	1400 Pine Road	Portland	OR	97201	12.10	
Craig Goodman, MD	4237 Semple Street	San Jose	CA	97862	30.24	
East-West Tours	8009 Johnson Drive	San Francisco	CA	94116	21.31	21.31
KIKA Radio	3400 Wolfe City Dr.	Reno	NV	89501	12.10	
Howard Kweller, MD	13 Hostettler Road	San Jose	CA	97862	30.24	30.24
Ocular Diagnostic Assoc.	3302 Stonewall	San Francisco	CA	94116	12.10	
United Travel	1300 Fountain Ave.	Spokane	WA	99186	12.10	

Message

For Julie Thompson

From Mr. Duran, Soft Warehouse

Date (Current Date) Time 1:15 p.m.

Phone No. (214) 457-3278

Telephoned	☐	Please call	☑
Called to see you	☐	Will call again	☐

Message: Returned your call. He will be available on Thursday (of next week) to give additional training on the new computers. Callback to confirm date.

Call taken by (Your Name)

Subject Filing Database

SKIS	BINDINGS	POLES	BOOTS	SKIWEAR	FOOTWEAR	GLOVES	GOGGLES
Atomic	ESS	Elan	Koflach	Degre7	Kaufman	Europa	Dupont
Dynaster	Geze	Head	Nordica	Fera	Lange	Gates-Mill	Head
Fisher	Look	Lange	Raichle	Gerry	Winterheat	Hotspot	Serengeti
K2	Nordica	Olin	Salomon	Nils		Seirus	Smith Sport
Kneissel	Salomon	Technic	Technic	North face		Woolrich	
Marker	Tyrolia	Tyrolia		Stag			
Olin				Technic			
Salomon							

SKI--On The Edge

MEMO

DATE:

TO:

FROM:

SUBJECT:

Message

For________________________________

From________________________________

Date_______________Time_______________

Phone No.____________________________

Telephoned	☐	Please call	☐
Called to see you	☐	Will call again	☐

Message: ____________________________

Call taken by____________________________

Ski - On The Edge

OUT

Follow-up date ____________________

Name or subject

Signature or name of borrower

Department

Date borrowed

EVALUATION SHEET

Date Completed	Project	Grade
________________	**Alphabetic File for New Individual Subscribers --Manual**	______
Redo Y N	____ Used ARMA Rules ____ Indexed Correctly ____ Alphabetized Correctly	
Comments:		
________________	**Alphabetic File for New Business Subscribers --Manual**	______
Redo Y N	____ Used ARMA Rules ____ Indexed Correctly ____ Alphabetized Correctly	
Comments:		
________________	**Subject Filing--Manual**	______
Redo Y N	____ Used Suggested Subject File ____ Alphabetized Correctly ____ Indexed Correctly	
Comments:		

Student Name ______________________________ Class ______________

BIP/Simulations
Record Management Evaluation Sheet

Date Completed	Project	Grade

____________ **Database Lists of Subscribers** ______

Redo Y N

_____ Set Up Database Correctly
_____ Fields Set Up Correctly
_____ All Individual and Business Data Entered
_____ Databases Proofread
_____ Print List of Individual Subscribers
_____ Print List of Business Subscribers

Comments:

____________ **Memo Incorporating Database Information** ______

Redo Y N

_____ Used Acceptable Memo Format
_____ Reference Initials
_____ Enclosure Notation
_____ Included List of Paid Customers
_____ Neatness

Comments:

____________ **Outguide** ______

Redo Y N

_____ Legible
_____ Current Dates
_____ Accurate Information

Comments:

Student Name ______________________________ Class ____________

BIP/Simulations
Record Management Evaluation Sheet

Date Completed	Project	Grade
________	**Combined List of Individual/Business Subscribers in the Pacific Region**	______
Redo Y N	_____ Fields Set Up Correctly _____ Alphabetized by Last Name _____ Used Only Pacific Region Customers	
Comments:		
________	**Telephone Message**	______
Redo Y N	_____ Filled in Completely _____ Legible _____ Special Notation Made _____ Neatness	
Comments:		
________	**Subject File Database**	______
Redo Y N	_____ Fields Set Up _____ Good Report Design _____ Good Organization	
Comments:		

Student Name ______________________________ Class ______________

SKI - On The Edge

Office Procedures Manual

Rules for Alphabetic Filing*

The following seven rules provide consistency in simplified filing.

1. Alphabetize by arranging files unit-by-unit and letter-by-letter within each unit.
2. Each filing unit in a filing segment should be considered. This includes prepositions, conjunctions, and articles. The only exception is when the word **the** is the first filing unit in a filing segment. In this case, **the** is the last filing unit. Spell out all symbols, e.g., &, $, #, and file alphabetically.
3. File "nothing before something." File single unit filing segments before multiple unit filing segments.
4. Ignore all punctuation when alphabetizing. This includes periods, commas, dashes, hyphens, apostrophes, etc. Hyphenated words are considered one unit.
5. Arabic and Roman numerals are filed sequentially before alphabetic characters. All Arabic numerals precede all Roman numerals.
6. Acronyms, abbreviations, and radio and television station call letters are filed as one unit.
7. File under the most commonly used name or title. Cross-reference under other names or titles that might be used in an additional request.

Personal Names

1. **Simple Personal Names**
   Use the last (surname) as the first filing unit. The first name or initial is the second filing unit. Subsequent names or initials are filed as successive units.
2. **Personal Names with Prefixes**
   Surnames that include a prefix are filed as one unit even if the prefix is followed by a space. Examples of prefixes are: D', Da, De, Del, De la, Della, Den, Des, Di, Du, El, Fitz, L', La, Las, Le, Les, Lo, Los, M', Mac, Mc, O', Saint, St., Ste., Te, Ten, Ter, Van, Van de, Van der, Von, Von der.
3. **Personal Names with Personal and Professional Titles and Suffixes**
   Suffixes are not used as filing units except when needed to distinguish between two or more identical names. When needed, a suffix is the last filing unit and is filed as written, ignoring punctuation.
4. **Personal Names Which Are Hyphenated**
   Ignore the hyphen and file the two names as one unit.

---

* Taken from 1989-1992 Business Professionals of America *Competitive Events Guidelines*, p. 65 (Association of Records Managers and Administrators, Inc., 4200 Somerset Drive, Suite 215, Prairie Village, KS 66208).

5. **Pseudonyms and Royal Religious Titles**
   Pseudonyms are filed as written. Personal names that start with a royal or religious title and are followed by only a given name(s) are filed as written.

6. **Foreign Personal Names**
   If the surname is identifiable, file the name as any other personal name is filed. If there is a question about the surname, use the last name as the first filing unit and make a cross-reference from the first name.

7. **Nicknames**
   When a person commonly uses a nickname as a first name, file using the nickname. Cross-reference from the given name only if necessary.

Business Names

When the same filing segment is applicable to more than one location, filing order is determined by an identifying location. In the case of banks, unions, etc., this location may be a branch, local number, post office, etc. For most businesses, it will be an address. When using an address, cities are considered first, followed by states or provinces, street names, house number or building number in that order.

Address Arrangement

When the first units of street names are written as the figures, the names are considered in ascending numeric order and placed together before alphabetic street names.

Street names with compass directions are considered as written. Numbers after compass directions are considered before alphabetic names (East 8th, East Main, Franklin, SE Eighth, Southeast Eighth, etc.)

If a filing unit within an address is not necessary for identification, it does not have to be used.

Business and Organization Names

1. Business and organization names are filed as written using the business letterhead or trademark as a guide. Names with prefixes follow the example for personal names with prefixes.

   Note: When necessary to ensure information retrieval, cross-reference between acronyms and the complete name.

2. Subsidiaries of businesses will be filed under their own name with a cross-reference to the parent company if needed.

3. Place names in business names will follow the standard rule that each word/filing unit is treated as a separate filing unit.

4. Compass Terms In Business Names

Each word/unit in a filing segment containing compass terms is considered a separate filing unit. If the term includes more than one compass point, treat it as written. Establish cross-references as needed.

Governmental/Political Designations

When filing governmental/political material, the name of the major entity is filed first followed by the *distinctive* name of the department, bureau, etc.

This rule covers all governmental/political divisions, agencies, departments, committees, etc., from the federal to the county/parish, city, district, and ward level.

Federal

Prefix with the name of the government and eliminate the department, i. e., Department of the Interior, Department of the Treasury, etc., file titles of the office, service, bureau, etc., by their distinctive names.

United States Government
    Coast Guard

United States Government
    Environmental Protection Agency

United States Government
    Forest Service

United States Government
    Interstate Commerce Commission

State and Local

State, county, parish, city, township and village governmental/political divisions are filed by their distinctive names. The words "county of," "city of," "department of," etc., if needed and as appropriate, are added for clarity and are considered filing units.

Note: If "of" is not part of the official name as written, it is not added.

Foreign Governments

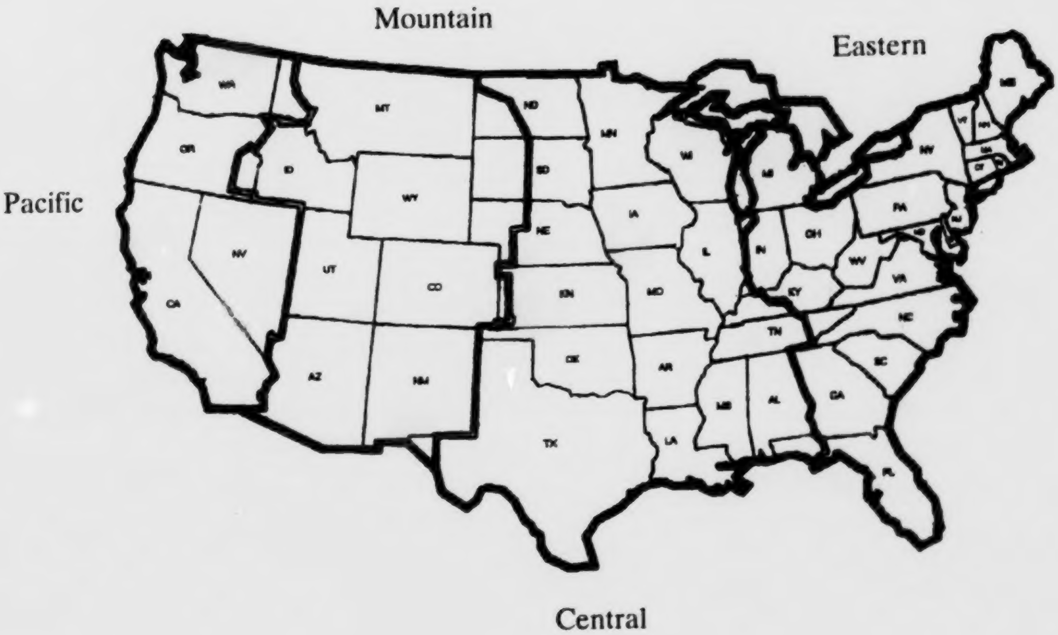
The distinctive English name is the first filing unit. If needed, the balance of the formal name of the government forms the next filing unit(s). Divisions, departments and branches follow in sequential order, reversing the written order where necessary to give the distinctive name precedence in the filing arrangement.

States, colonies, provinces, cities, and other divisions of foreign governments are filed by their distinctive or official names as spelled in English. Cross-reference written name to official native name where necessary.

Note: A current copy of *The World Almanac and Book of Facts* is an excellent reference for the translation of foreign names into English and for clarification of relations between governments. Another source is the book *Countries, Dependencies and Areas of Special Sovereignty* published by U. S. Dept. of Commerce, National Bureau of Standards, Institute of Computer Sciences & Technology, Gaithersburg, MD 20899.

SKI - ON THE EDGE REGIONS

A = Pacific
B = Mountain
C = Central
D = Eastern



SUBJECT FILE INDEX

- Ski Equipment
  - Skis
  - Bindings
  - Poles
  - Boots
- Ski Apparel
  - Skiwear
  - Footwear
- Ski Accessories
  - Gloves
  - Goggles

SKI - ON THE EDGE

CONGRATULATIONS! Welcome to the dynamic magazine publishing company of *SKI---On The Edge*. You have been hired as a file clerk in the central file department. Your responsibilities are to maintain the manual files and create a database to convert the manual files to an electronic filing system.

Work is received in the central file department daily in the form of handwritten information, computerized information product and service brochures and catalogs. Managing knowledge requires the ability to collect data from many sources, organize the data into meaningful information, and have the information available when it is needed. Ms. Julie Thompson, a veteran employee, is your supervisor. She and the rest of the central file department are "keepers of secrets"--information contained in the company files. As an employee in this department, you are entrusted with valuable information and are expected to protect and keep the information confidential.

Good luck in your new position!

Ski - On The Edge

From the desk of J. Thompson

To: File Clerk

Date: Current Date

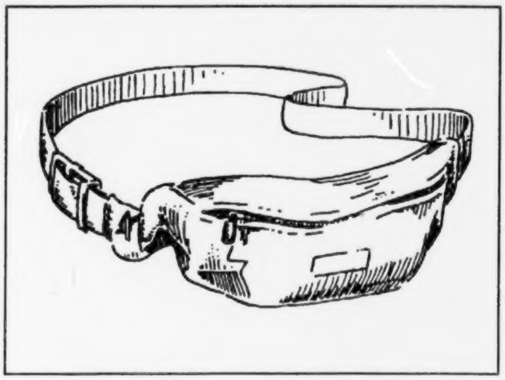
Subject: Alphabetic file for individual subscribers

Good Morning! Monday mornings always seem to be hectic and this one is no different. In the morning mail we have received several new individual subscriptions to our magazine. Please index and place them in alphabetical order so later they can be added to our subscription card catalog.

Save up to 30% *SKI On The Edge*!
Get this family fanny pack FREE!

YES, *send me one SKI--On The Edge fanny pack FREE with my subscription to SKI--On The Edge for the term checked. (Fanny pack shipped on receipt of subscription payment.)*

☐ Three years (21 issues) $30.24 - **Save 30%**
☐ Two years (14 issues) $21.31 - **Save 26%**
☒ One year (7 issues) $12.10 - **Save 16%**



CHECK ONE:

☐ **Payment enclosed** ☒ **Bill me later**

☒ Mr. ☐ Mrs. ☐ Ms. ☐ Business

John A. Evans
Address 1688 Nashville Apt. ______
City St. Louis Suite ______
State MO ZIP 65320

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

Allow 5-6 weeks for delivery of free gift.
Hurry Supplies are limited.

- **Heavy-Duty Denier Nylon** - **Rustproof Zipper**
- **Lightweight, water resistant** - **Perfect for extras**

Save up to 30% *SKI On The Edge*!
Get this family fanny pack FREE!

YES, *send me one SKI--On The Edge fanny pack FREE with my subscription to SKI--On The Edge for the term checked. (Fanny pack shipped on receipt of subscription payment.)*

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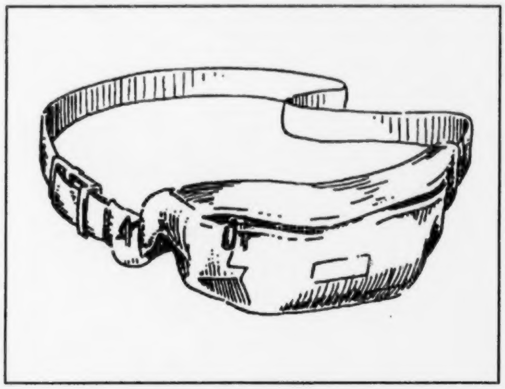

CHECK ONE:

☐ **Payment enclosed** ☑ **Bill me later**

☑ Mr. ☐ Mrs. ☐ Ms. ☐ Business

John A. Evans
Address 3415 Northern Apt. ______
City Pleasanton Suite ______
State CA ZIP 94567

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

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CHECK ONE:

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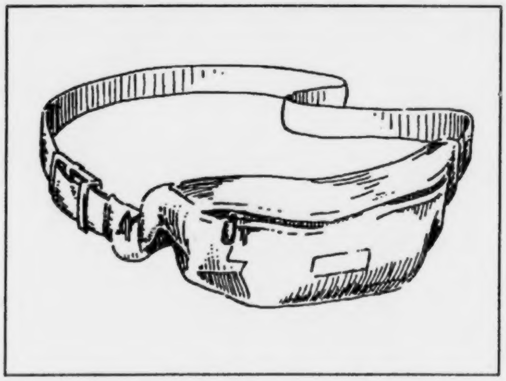
☒ Mr. ☐ Mrs. ☐ Ms. ☐ Business

Charley G. Wilson
Address 4513 Story Dr. Apt.
City Oyster Bay Suite
State MA ZIP 02786

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

Allow 5-6 weeks for delivery of free gift.
Hurry Supplies are limited.



- **Heavy-Duty Denier Nylon** • **Rustproof Zipper**
- **Lightweight, water resistant** • **Perfect for extras**

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☒ One year (7 issues) $12.10 - Save 16%

CHECK ONE:

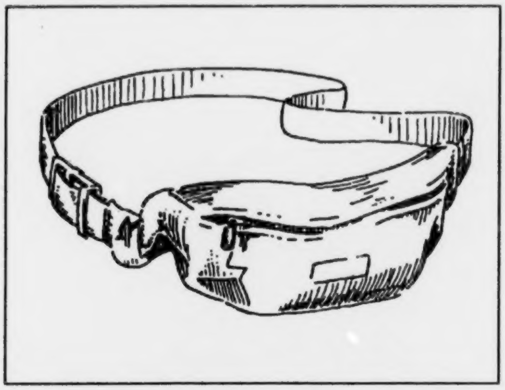
☒ **Payment enclosed** ☐ **Bill me later**

☒ Mr. ☐ Mrs. ☐ Ms. ☐ Business

John A. Evans
Address 325 Robin Rd. Apt.
City Pleasanton Suite
State CA ZIP 94567

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

Allow 5-6 weeks for delivery of free gift.
Hurry Supplies are limited.



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CHECK ONE:

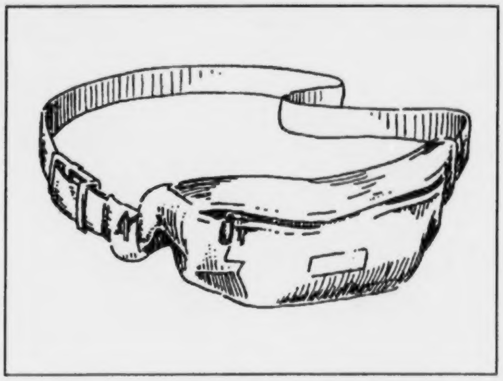
☐ **Payment enclosed** ☒ **Bill me later**

☐ Mr. ☒ Mrs. ☐ Ms. ☐ Business

Marie Mac Arthur
Address 8180 Star Avenue Apt. ____
City Chico Suite ____
State CA ZIP 95962

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

Allow 5-6 weeks for delivery of free gift.
Hurry Supplies are limited.



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CHECK ONE:

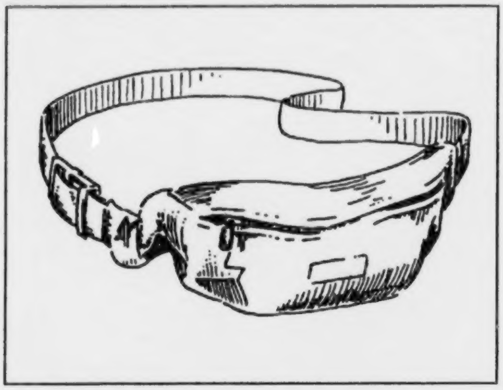
☐ **Payment enclosed** ☒ **Bill me later**

☒ Mr. ☐ Mrs. ☐ Ms. ☐ Business

John Nichols
Address 1428 Washington Apt. ____
City Durango Suite ____
State CO ZIP 80254

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

Allow 5-6 weeks for delivery of free gift.
Hurry Supplies are limited.



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Herb A. Carter
Address 37 Melody Lane Apt. ______
City Omaha Suite ______
State NE ZIP 68695

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Allow 5-6 weeks for delivery of free gift.
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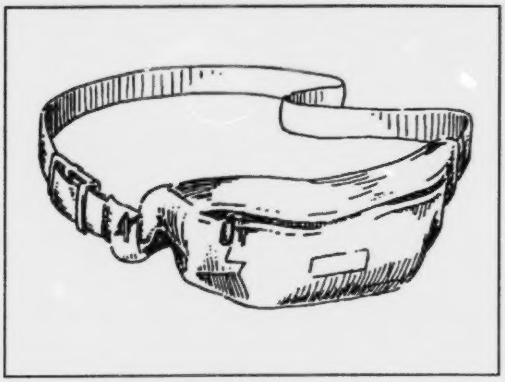

- **Heavy-Duty Denier Nylon** • **Rustproof Zipper**
- **Lightweight, water resistant** • **Perfect for extras**

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City Stowe Suite ______
State VT ZIP 05674

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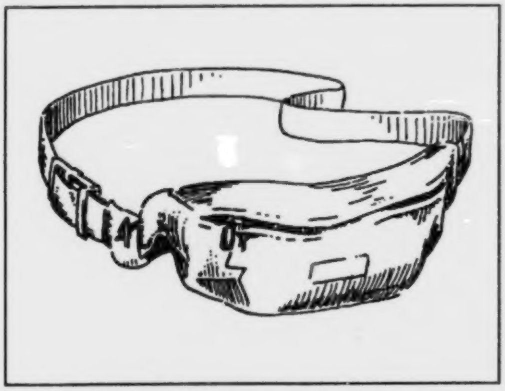

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Address 1500 TECHNOLOGY Apt. ______
City SUNNYVALE Suite ______
State CA ZIP 95160

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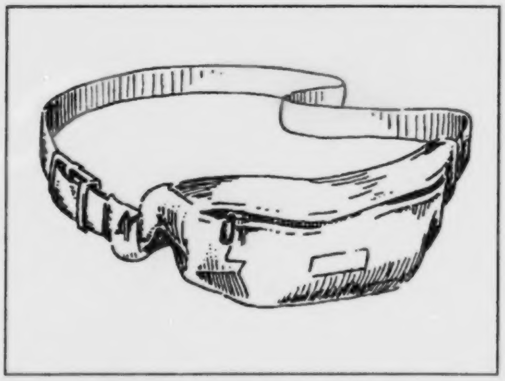

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City Greenville Suite ______
State TX ZIP 75402

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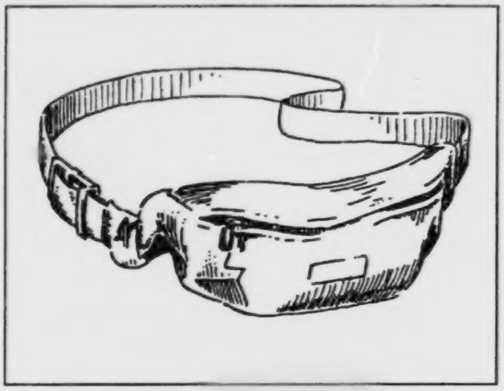

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City Bel Air Suite _____

State MD ZIP 21024

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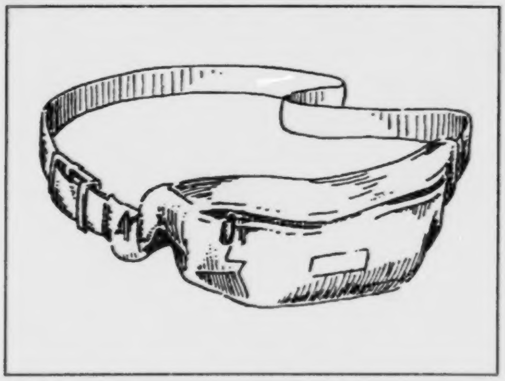

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State CO ZIP 80223

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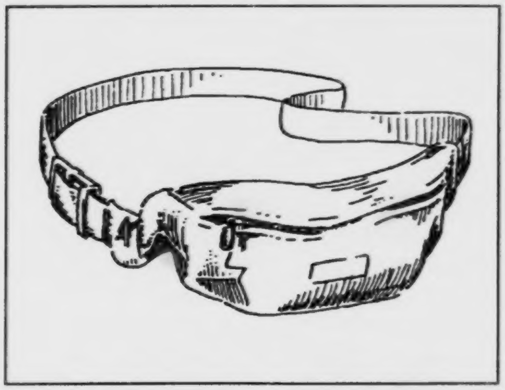

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JESSE NORTH
Address 14 COLONY DRIVE Apt. ______
City LINCOLN Suite ______
State NE ZIP 68601

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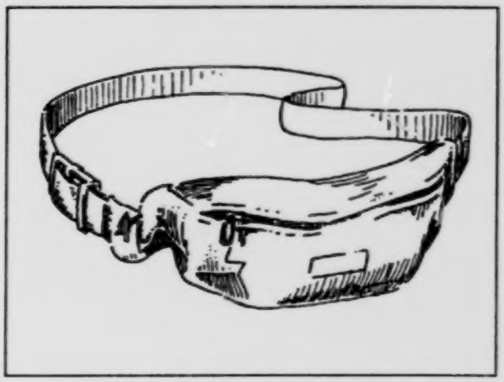

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Randall Wilson
Address 332 Story Dr Apt. ______
City Oyster Bay Suite ______
State MA ZIP 02786

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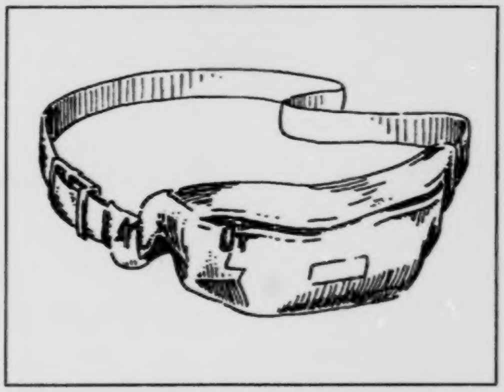

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Ski - On The Edge

From the desk of J. Thompson

To: File Clerk

Date: Current Date

Subject: Alphabetic file of business subscribers

The company has been successful in its new subscription campaign. Thousands of high school students from all over the nation have enrolled in the "On the Edge" campaign in hopes of winning one of several scholarships available.

We also have had a considerable increase in business subscribers. These are the business subscriptions that have come in this morning's mail. Index and alphabetize the business subscription cards. Keep them separate from the individual subscribers.

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Chamber of Commerce
Address 436 Wesley St. Apt. ______
City Baton Rouge Suite ______
State LA ZIP 70801

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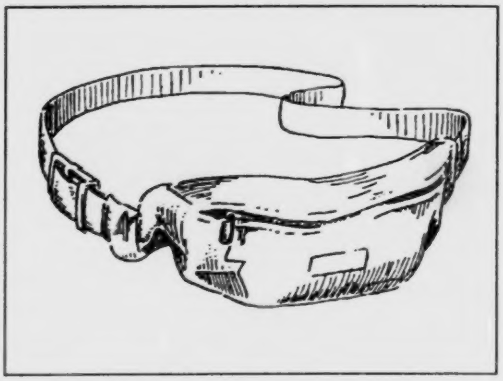

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Anchor Inn Marina + Resort
Address 110 Manhattan Dr. Apt. ______
City Miami Suite ______
State FL ZIP 33101

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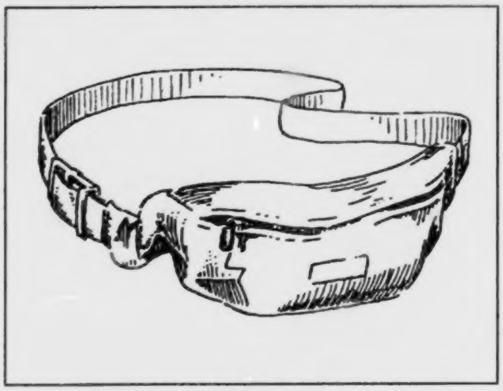

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Bank One of Texas
Address 119 North Roselene Apt. ______
City Houston Suite ______
State TX ZIP 77325

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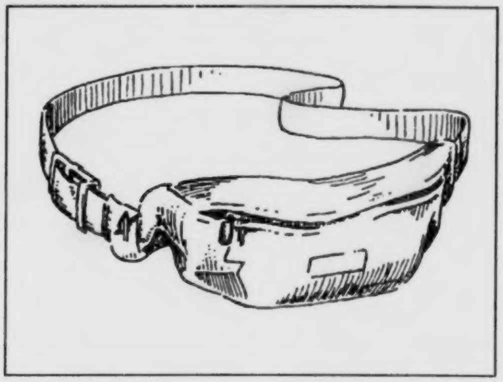

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Country Optical
Address 1400 Pine Rd. Apt. ______
City Portland Suite ______
State OR ZIP 97201

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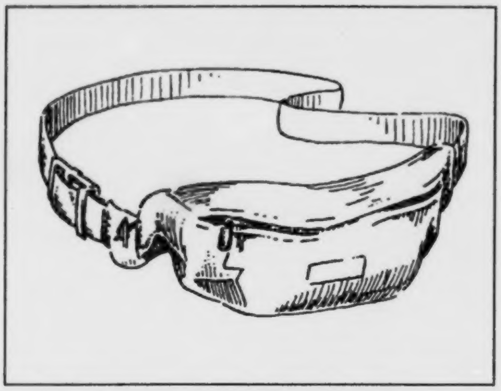

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Craig Goodman, M.D.
Address 4237 Semple St. Apt. ______
City San Jose Suite ______
State CA ZIP 97862

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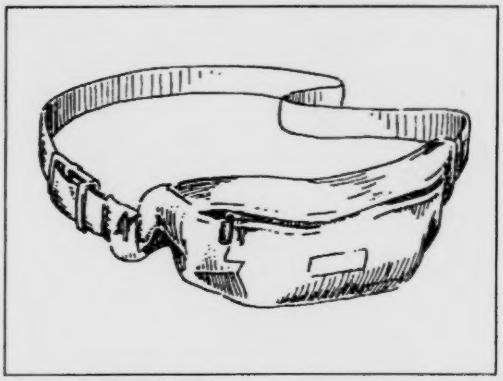

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Address 3400 Wolfe City Dr. Apt. ______
City Reno Suite ______
State NV ZIP 89501

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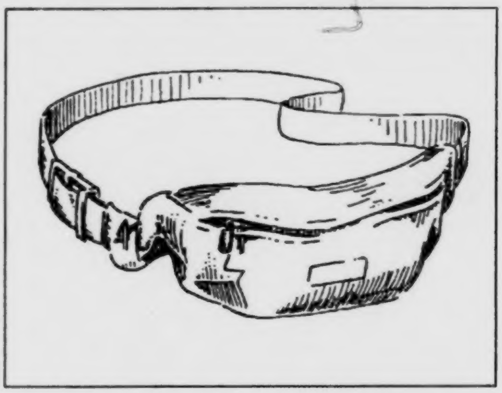

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East-West Tours
Address 8009 Johnson Dr. Apt. ______
City San Francisco Suite ______
State CA ZIP 94116

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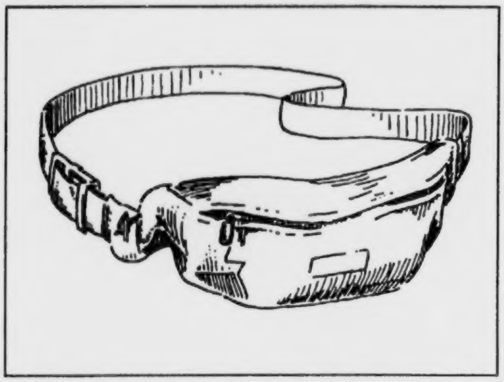

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United Travel
Address 1300 Fountain Ave. Apt. ______
City Spokane Suite ______
State Washington ZIP 99186

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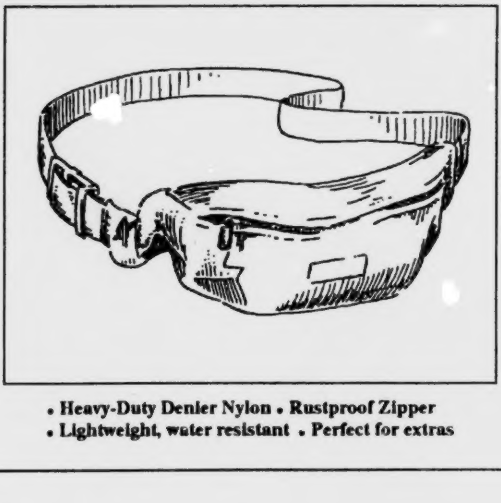

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North East Travel Agency
Address 8919 Parkland Apt. ______
City Dallas Suite ______
State Texas ZIP 74528

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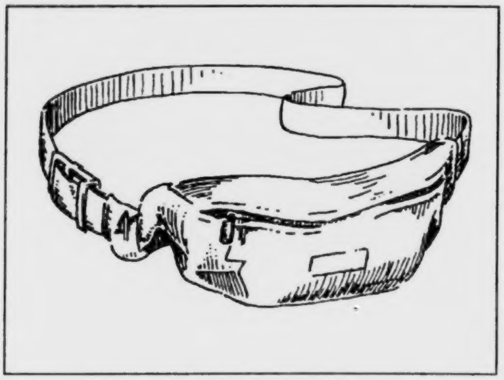

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Howard Kueller, M.D.
Address 73 Hostettler Rd. Apt. ______
City San Jose Suite ______
State California ZIP 97862

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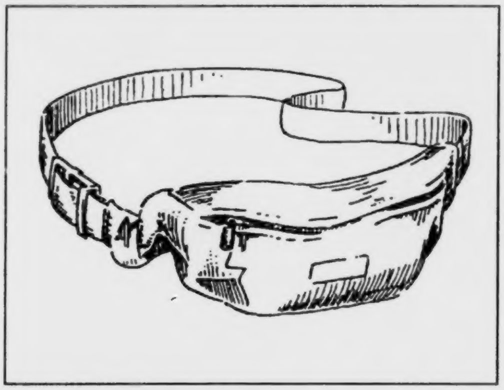

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O'Connell Sports Center
Address 115 Ski Dr. Apt. ________
City Aspen Suite ________
State CO ZIP 81611

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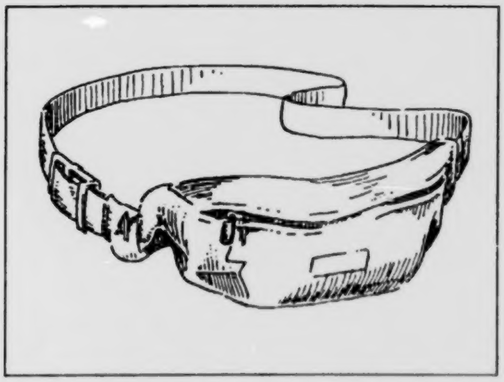

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Get this family fanny pack FREE!

YES, *send me one SKI--On The Edge fanny pack FREE with my subscription to SKI--On The Edge for the term checked. (Fanny pack shipped on receipt of subscription payment.)*

☐ Three years (21 issues) $30.24 - **Save 30%**
☒ Two years (14 issues) $21.31 - **Save 26%**
☐ One year (7 issues) $12.10 - **Save 16%**

CHECK ONE:

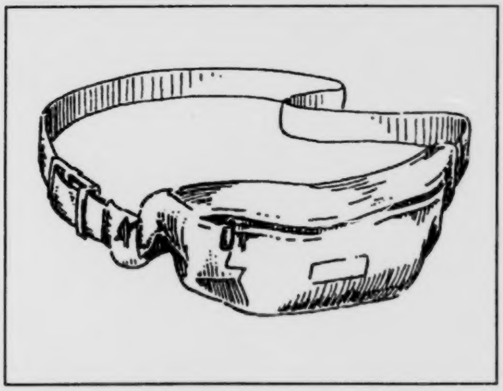
☐ **Payment enclosed** ☑ **Bill me later**

☐ Mr. ☐ Mrs. ☐ Ms. ☒ Business

Elite Ski School
Address 110 Edgewood Dr.
City Vail Suite ________
State CO ZIP 80260

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

Allow 5-6 weeks for delivery of free gift.
Hurry Supplies are limited.



- **Heavy-Duty Denier Nylon** - **Rustproof Zipper**
- **Lightweight, water resistant** - **Perfect for extras**

Save up to 30% *SKI On The Edge*!
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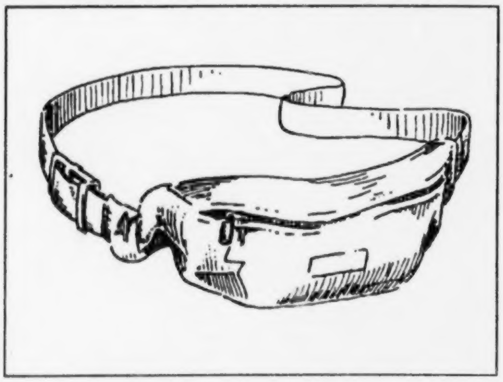

CHECK ONE:

☐ **Payment enclosed** ☑ **Bill me later**

☐ Mr. ☐ Mrs. ☐ Ms. ☑ Business

BRENDAS STYLE SHOP
Address 5690 EASTLAND Apt. ________
City BATON ROUGE Suite ________
State LA ZIP 70801

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

- **Heavy-Duty Denier Nylon**
- **Rustproof Zipper**
- **Lightweight, water resistant**
- **Perfect for extras**

Allow 5-6 weeks for delivery of free gift.
Hurry Supplies are limited.

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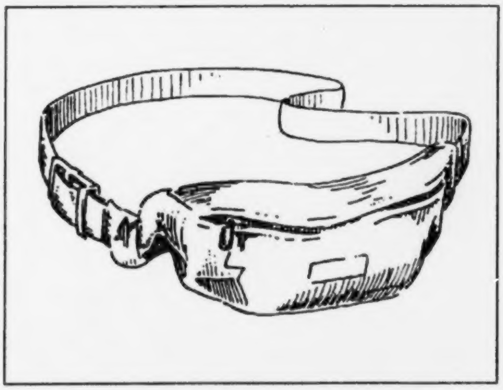

CHECK ONE:

☐ **Payment enclosed** ☒ **Bill me later**

☐ Mr. ☐ Mrs. ☐ Ms. ☑ Business

Walnut Cove Yacht Club
Address 3286 Broadway Apt. ________
City Tampa Suite ________
State FL ZIP 33601

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

- **Heavy-Duty Denier Nylon**
- **Rustproof Zipper**
- **Lightweight, water resistant**
- **Perfect for extras**

Allow 5-6 weeks for delivery of free gift.
Hurry Supplies are limited.

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CHECK ONE:

☐ **Payment enclosed** ☒ **Bill me later**

☐ Mr. ☐ Mrs. ☐ Ms. ☒ Business

Family Vision Center

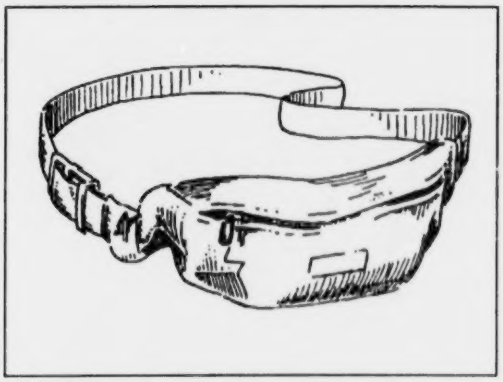
Address 3418 Story Dr. Apt. ______

City Austin Suite ______

State TX ZIP 76510

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

Allow 5-6 weeks for delivery of free gift.
Hurry Supplies are limited.



- **Heavy-Duty Denier Nylon**
- **Rustproof Zipper**
- **Lightweight, water resistant**
- **Perfect for extras**

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Get this family fanny pack FREE!

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CHECK ONE:

☐ **Payment enclosed** ☑ **Bill me later**

☐ Mr. ☐ Mrs. ☐ Ms. ☑ Business

Ocular Diagnostic Assoc.

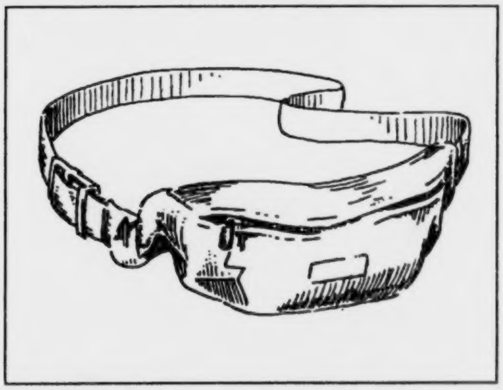
Address 3302 Stonewall Apt. ______

City San Francisco Suite ______

State CA ZIP 94116

Savings based on annual newsstand cost of $14.40 Canadian orders, add $8 per year postage: Foreign order, add $8 per year postage (U.S. Currency). First issue shipped in season. 30 to 60 days from receipt of order.

Allow 5-6 weeks for delivery of free gift.
Hurry Supplies are limited.



- **Heavy-Duty Denier Nylon**
- **Rustproof Zipper**
- **Lightweight, water resistant**
- **Perfect for extras**

Ski - On The Edge

From the desk of J. Thompson

To: File Clerk

Date: Current Date

Subject: Subject File

We have received several product brochures and catalogs. Please set up a subject file using the subject guide in the *Office Procedures Manual* and place each of the ski product brochures and catalogs. In the categories, order the appropriate headings in the subject file.

Kneissel Skis
Dynaster Skis
Head Goggles
Tyrolia Poles
Geze Bindings
Fisher Skis
Degre7 Skiwear
Technic Skiwear
Koflach Boots
Nordica Bindings
Salomon Skis
Lange Footwear
Nils Skiwear
Europa Gloves
Salomon Bindings
Elan Poles
Olin Skis
Stag Ski-Wear
Tyrolia Bindings
Serengeti Goggles
Technic Poles
Woolrich Gloves
Atomic Ski
Look Bindings
Seirus Gloves
North Face Skiwear
Lange Poles
Technic Boots
Head Poles
Marker Skis
Smith Sport Goggles
Winterheat Footwear
Nordica Boots
Hotspot Gloves
Gates-Mill Gloves
Fera Skiwear
Dupont Goggles
Kaufman Footwear
Gerry Skiwear
Olin Poles
K2 Skis
Raichle Boots
ESS Bindings
Salomon Boots

Ski - On The Edge

From the desk of J. Thompson

To: File Clerk

Date: Current

Subject: Creating a Database

The business is expanding so fast that using a manual filing system is no longer practical. Please create a database for both individual and business subscribers.

Later, when you have time, you can set up our subject files on the database.

Use the following field names for the individual subscribers:

First
Middle
Last Name
Street
City
State
ZIP
Amount Due
Amount Paid
Region

Use Business Name in place of First, Middle, and Last Name.

Using the map provided in the Office Procedures Manual code each of the subcriptions by region using a P for Pacific, an M for Mountain, a C for Central, and an E for Eastern.

Print only the following fields: Name, Street, City, State, ZIP. Use condensed print, sideways, or landscape features on your database program.

- Print an alphabetical list of all the individual subscribers.
- Print an alphabetical list of all the business subscribers.

Ski - On The Edge

From the desk of J. Thompson

To: File Clerk

Date: Current Date

Subject: Memo to Shipping Department

All of the new subscribers are anxious to receive the SKI FANNY PACK along with the 16 to 30% savings on their *SKI - On The Edge* subscription.

Prepare a memo authorizing the shipping department to send fanny packs to each of the individual and business subscribers who have paid for their subscriptions.

Ski - On The Edge

From the desk of J. Thompson

To: File Clerk

Date: Current Date

Subject: Advertising Information--Outguide

Sally Jones in the advertising department is preparing a full page ad on Salomon skis, boots, and bindings for next month's issue. Complete the charge-out information on the OUTGUIDE for checking out the Salomon product file.

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Ski - On The Edge

From the desk of J. Thompson

To: File Clerk

Date: Current Date

Subject: Pacific Region Subscribers

Please prepare an alphabetical list of individual subscribers and an alphabetical list of business subscribers who live in the Pacific Region for Mr. Jones. He needs these by tomorrow afternoon.

You will want to use the following field names in the report: First, Middle, Last Name or Business Name; Street; City; State; ZIP; Amount Due and Amount Paid.

INTERRUPTION!

Ring - Ring - Ring

It is 1:15 p.m. and Ms. Thompson is still on her lunch hour. Mr. Duran of Soft Warehouse has returned Ms. Thompson's call and asks that you please give her a message. He tells you that he will be available on Thursday (of next week) to give additional training on the new computers. Mr. Duran requests that Ms. Thompson call him back as soon as possible to confirm the date. His telephone number is (214) 457-3278.

Ski - On The Edge

From the desk of J. Thompson

To: File Clerk

Date: Current Date

Subject: Creating a Database Subject File

If you have some extra time today, please set up your database subject file. Key the catalogs and brochures received earlier. Use the listing of subject divisions in the Office Procedures Manual for the titles.

Prepare and print out a report that includes the data on each of the categories. Make sure to place an appropriate heading on the report.

Business Information Processing

Spreadsheet Simulation

INSTRUCTIONS

This is a simulation prepared for Section IV, Unit 1 of the *Business Information Processing Curriculum*. The simulation should be completed after the study of the reference materials in **Section IV: Information Management**. Students should have studied and completed all written work for **Unit I--Electronic Spreadsheet Applications**. The competency test following this unit should determine if the students are ready for the hands-on simulation.

This simulation should be completed using a computer. Your students will need access to a computer, a blank disk for data storage, and a spreadsheet software package of your choice. It is assumed that you have spent time to acquaint the students with both the computer and spreadsheet software that they will use.

This simulation contains the following spreadsheet activities:

- Creating a Payroll Spreadsheet
- Using Spreadsheet Formulas for Figuring Payroll
- Printing Formulas
- Totaling Rows, Inserting Rows, and Formatting with Dollar signs and Decimals
- Inserting a Column
- Finding the Average, Minimum and Maximum
- Performing File Maintenance Activities
- Using "What If" Projections

SPECIFIC INSTRUCTIONS

1. Because of the variety of spreadsheet programs available, your software may not have the capabilities to perform some of the activities. You may need to omit some activities or modify some of the instructions.
2. Make sure your students know how to print a spreadsheet either sideways (landscape) or by using compressed print.

3. During a simulation is a good time to teach students about backing up diskettes. Emphasis should be placed on the importance of retaining a permanent record of all company data and what could happen if the data are lost.

4. Explain to students how spreadsheet software is used in an office. Choose an office that might be familiar to everyone--maybe the school office or an accounting office.

5. Have students bring printouts of any spreadsheet reports they can find from their place of employment, or from home, etc. Help them "evaluate" the process they think might have been followed during the creation and the use of that spreadsheet. Example: which formulas might have been used to obtain the specific results they see?

6. Brief descriptions and special instructions for activities in this simulation.

Creating a Payroll Using a Spreadsheet

Students are instructed to prepare a spreadsheet file called "Payroll". Basically, in this activity, they are going to set up the worksheet, enter the hourly payroll data, and print a copy of the file.

Using Spreadsheet Formulas for Figuring Payroll and Printing Formulas

Students are requested to set up formulas to figure payroll using the company policy in figuring overtime work. They are to set up the formulas and print a copy of both the formulas and the spreadsheet for you to look over. The main reason for doing this to verify that they did not do their figuring on the calculator and then insert the number. A printout of the Lotus 1-2-3 formula sheet is included in the answers.

Totaling Rows, Inserting Rows, and Formatting with Dollar Signs and Decimals.

Students are requested to set up a formula for totaling the rows, insert blank rows, and print two copies of the spreadsheet--one with decimal places and one without.

Inserting a Column

Students are requested to insert a column containing information about their position. They will be duplicating the column of formulas and observing how the spreadsheet software does the recalculation for them and prepare an updated print out.

Finding the Average, Minimum and Maximum

Students are requested to use the @AVG, @MIN, and @MAX spreadsheet software functions. They are to prepare and print a table with this information.

Performing File Maintenance Activities

Students are requested to update the information in their spreadsheet payroll file and print a copy of the information.

Using "What If" Projections to Project 4.5% Salary Increase

Students are requested to figure a 4.5% across the board raise for everyone in the company. They are to add the net pay line of the previous worksheet and compare the difference.

7. For advanced students:

    a. Have students create macros to move columns and rows or for other functions within the spreadsheet.

    b. Have students produce a letter with a table that is imported from a spreadsheet.

    c. If time allows and if software is available, introduce another spreadsheet software package to advanced students. Develop a short unit in the creation and use of the spreadsheet. Have students compare the similarities and differences between the use of two software packages.

    d. Have students print out spreadsheets as graphics and with graphs and charts.

Materials Needed:	**Equipment Needed:**
Computer paper	Computers
Software manual	Printer
Spreadsheet software	
Additional spreadsheet software (optional)	

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ANSWERS

Creating a Payroll Using a Spreadsheet

B & C ENTERPRISES

Payroll for the Week of *(Current Date)*

	J. Carpenter	L. Carpenter	V. Grant	T. Hopkins	L. Neese	P. Moore	E. Morales	H. Selinger	G. Warner
Hrs. Wkd.	40.00	39.00	40.00	40.00	40.00	38.00	40.00	40.00	40.00
Hrly. Rate	10.75	12.10	9.50	10.20	10.20	11.50	12.00	9.50	12.00
Reg. Pay									
OT Hours	4.00		1.00	2.00	5.00		6.00	4.00	8.00
OT Pay									
TOT. GROSS									
LESS: Ded.									
Fed. Tax									
S. S.									
Ins. Opt.									
Health									
Life									
Dental									
TOT. DED.									
NET PAY									

Using Spreadsheet Formulas for Figuring Payroll

B & C ENTERPRISES

Payroll for the Week of *(Current Date)*

	J. Carpenter	L. Carpenter	V. Grant	T. Hopkins	L. Neese	P. Moore	E. Morales	H. Selinger	G. Warner
Hrs. Wkd.	40.00	39.00	40.00	40.00	40.00	38.00	40.00	40.00	40.00
Hrly. Rate	10.75	12.10	9.50	9.25	10.20	11.50	12.00	9.50	12.00
Reg. Pay	430.00	471.90	380.00	370.00	408.00	437.00	480.00	380.00	480.00
OT Hours	4.00		1.00	2.00	5.00		6.00	4.00	8.00
OT Pay	64.50		14.25	27.75	76.50		108.00	57.00	144.00
TOT. GROSS	494.50	471.90	394.25	397.75	484.50	437.00	588.00	437.00	624.00
LESS: Ded.									
Fed. Tax	84.07	80.22	67.02	67.62	82.37	74.29	99.96	74.29	106.08
S. S.	37.83	36.10	30.16	30.43	37.06	33.43	44.98	33.43	47.74
Ins. Opt.									
Health	21.26	20.29	16.95	17.10	20.83	18.79	25.28	18.79	26.83
Life	5.93	5.66	4.73	4.77	5.81	5.24	7.06	5.24	7.49
Dental	9.89	9.44	7.89	7.96	9.69	8.74	11.76	8.74	12.48
TOT. DED.	158.98	151.71	126.75	127.88	155.76	140.49	189.04	140.50	200.62
NET PAY	335.54	320.19	267.50	269.87	328.74	296.51	398.96	296.50	423.38

NOTE: Some figures may vary slightly because of rounding.

Printing Spreadsheet Formulas

F1: 'B & C ENTERPRISES
E3: 'Payroll for the Week of (Current Date)
C5: 'J. Car-
D5: 'L. Car-
E5: 'V.
F5: 'T. Hop-
G5: 'L.
H5: 'P.
I5: 'E.
J5: 'H. Sel-
K5: 'G.
L5: [W10] 'TO-
C6: 'penter
D6: 'penter
E6: 'Grant
F6: 'kins
G6: 'Neese
H6: 'Moore
I6: 'Morales
J6: 'inger
K6: 'Warner
L6: [W10] 'TAL
A8: 'Hrs. Wkd.
C8: (F2) 40
D8: (F2) 39
E8: (F2) 40
F8: (F2) 40
G8: (F2) 40
H8: (F2) 38
I8: (F2) 40
J8: (F2) 40
K8: (F2) 40
L8: (F2) [W10] +C8+D8+E8+F8+G8+H8+I8+J8+K8
A9: 'Hrly. Rate
C9: (C2) 10.75
D9: (C2) 12.1
E9: (C2) 9.5
F9: (C2) 9.25
G9: (C2) 10.2
H9: (C2) 11.5
I9: (C2) 12
J9: (C2) 9.5
K9: (C2) 12
L9: (C2) [W10] +C9+D9+E9+F9+G9+H9+I9+J9+K9
A10: 'Reg. Pay
C10: (C2) +C8*C9
D10: (C2) +D8*D9
E10: (C2) +E8*E9
F10: (C2) +F8*F9
G10: (C2) +G8*G9
H10: (C2) +H8*H9
I10: (C2) +I8*I9
J10: (C2) +J8*J9
K10: (C2) +K8*K9
L10: (C2) [W10] +C10+D10+E10+F10+G10+H10 +I10+J10+K10
A11: 'OT Hours
C11: (F2) 4
E11: (F2) 1
F11: (F2) 2
G11: (F2) 5
I11: (F2) 6
J11: (F2) 4
K11: (F2) 8
L11: (F2) [W10] +C11+D11+E11+F11+G11+H11+I11+J11+K11
A12: 'OT Pay
C12: (C2) 1.5*C9*C11
D12: (C2) 1.5*D9*D11
E12: (C2) 1.5*E9*E11
F12: (C2) 1.5*F9*F11
G12: (C2) 1.5*G9*G11
H12: (C2) 1.5*H9*H11
I12: (C2) 1.5*I9*I11
J12: (C2) 1.5*J9*J11
K12: (C2) 1.5*K9*K11
L12: (C2) [W10] +C12+D12+E12+F12+G12+H12+I12+J12+K12
A13: 'TOT. GROSS
C13: (C2) +C10+C12
D13: (C2) +D10+D12
E13: (C2) +E10+E12
F13: (C2) +F10+F12
G13: (C2) +G10+G12
H13: (C2) +H10+H12
I13: (C2) +I10+I12
J13: (C2) +J10+J12
K13: (C2) +K10+K12
L13: (C2) [W10] +C13+D13+E13+F13+G13+H13+I13+J13+K13
A15: 'LESS: Ded.
A16: 'Fed. Tax
C16: (C2) +C13*0.17
D16: (C2) +D13*0.17

```
E16:  (C2) +E13*0.17
F16:  (C2) +F13*0.17
G16:  (C2) +G13*0.17
H16:  (C2) +H13*0.17
I16:  (C2) +I13*0.17
J16:  (C2) +J13*0.17
K16:  (C2) +K13*0.17
L16:  (C2) [W10] +C16+D16+E16+F16
      +G16+H16+I16+J16+K16
A17:  'S. S.
C17:  (C2) +C13*0.0765
D17:  (C2) +D13*0.0765
E17:  (C2) +E13*0.0765
F17:  (C2) +F13*0.0765
G17:  (C2) +G13*0.0765
H17:  (C2) +H13*0.0765
I17:  (C2) +I13*0.0765
J17:  (C2) +J13*0.0765
K17:  (C2) +K13*0.0765
L17:  (C2) [W10] +C17+D17+E17+F17
      +G17+H17+I17+J17+K17
A18:  'Ins. Opt.:
A19:  ' Health
C19:  (C2) +C13*0.043
D19:  (C2) +D13*0.043
E19:  (C2) +E13*0.043
F19:  (C2) +F13*0.043
G19:  (C2) +G13*0.043
H19:  (C2) +H13*0.043
I19:  (C2) +I13*0.043
J19:  (C2) +J13*0.043
K19:  (C2) +K13*0.043
L19:  (C2) [W10] +C19+D19+E19+F19
      +G19+H19+I19+J19+K19
A20:  ' Life
C20:  (C2) +C13*0.012
D20:  (C2) +D13*0.012
E20:  (C2) +E13*0.012
F20:  (C2) +F13*0.012
G20:  (C2) +G13*0.012
H20:  (C2) +H13*0.012
I20:  (C2) +I13*0.012
J20:  (C2) +J13*0.012
K20:  (C2) +K13*0.012
L20:  (C2) [W10] +C20+D20+E20+F20 +G20
      +H20+I20+J20+K20
A21:  ' Dental
C21:  (C2) +C13*0.02
D21:  (C2) +D13*0.02
E21:  (C2) +E13*0.02
F21:  (C2) +F13*0.02
G21:  (C2) +G13*0.02
H21:  (C2) +H13*0.02
I21:  (C2) +I13*0.02
J21:  (C2) +J13*0.02
K21:  (C2) +K13*0.02
L21:  (C2) [W10] +C21+D21+E21+F21
      +G21+H21+I21+J21+K21
A22:  'TOT. DED.
C22:  (C2) +C16+C17+C19+C20+C21
D22:  (C2) +D16+D17+D19+D20+D21
E22:  (C2) +E16+E17+E19+E20+E21
F22:  (C2) +F16+F17+F19+F20+F21
G22:  (C2) +G16+G17+G19+G20+G21
H22:  (C2) +H16+H17+H19+H20+H21
I22:  (C2) +I16+I17+I19+I20+I21
J22:  (C2) +J16+J17+J19+J20+J21
K22:  (C2) +K16+K17+K19+K20+K21
L22:  (C2) [W10] +C22+D22+E22+F2
      G22+H22+I22+J22+K22
A24:  'NET PAY
C24:  (C2) +C13-C22
D24:  (C2) +D13-D22
E24:  (C2) +E13-E22
F24:  (C2) +F13-F22
G24:  (C2) +G13-G22
H24:  (C2) +H13-H22
I24:  (C2) +I13-I22
J24:  (C2) +J13-J22
K24:  (C2) +K13-K22
L24:  (C2) [W10] +C24+D24+E24+F24+G24
      +H24+I24+J24+K24
```

Totaling Rows--Without Dollar Signs

B & C ENTERPRISES

Payroll for the Week of *(Current Date)*

	J. Carpenter	L. Carpenter	V. Grant	T. Hopkins	L. Neese	P. Moore	E. Morales	H. Selinger	G. Warner	TOTAL
Hrs. Wkd.	40.00	39.00	40.00	40.00	40.00	38.00	40.00	40.00	40.00	**357.00**
Hrly. Rate	10.75	12.10	9.50	9.25	10.20	11.50	12.00	9.50	12.00	**96.80**
Reg. Pay	430.00	471.90	380.00	370.00	408.00	437.00	480.00	380.00	480.00	**3836.90**
OT Hours	4.00		1.00	2.00	5.00		6.00	4.00	8.00	**30.00**
OT Pay	64.50		14.25	27.75	76.50		108.00	57.00	144.00	**492.00**
TOT. GROSS	494.50	471.90	394.25	397.75	484.50	437.00	588.00	437.00	624.00	**4328.90**
LESS: Ded.										
Fed. Tax	84.07	80.22	67.02	67.62	82.37	74.29	99.96	74.29	106.08	**735.91**
S. S.	37.83	36.10	30.16	30.43	37.06	33.43	44.98	33.43	47.74	**331.16**
Ins. Opt.										
Health	21.26	20.29	16.95	17.10	20.83	18.79	25.28	18.79	26.83	**186.14**
Life	5.93	5.66	4.73	4.77	5.81	5.24	7.06	5.24	7.49	**51.95**
Dental	9.89	9.44	7.89	7.96	9.69	8.74	11.76	8.74	12.48	**86.58**
TOT. DED.	158.98	151.71	126.75	127.88	155.76	140.49	189.04	140.49	200.62	**1391.72**
NET PAY	335.54	320.19	267.50	269.87	328.74	296.51	398.96	296.51	423.38	**2937.20**

NOTE: Some figures may vary slightly because of rounding.

Totaling Rows--With Dollar Signs

B & C ENTERPRISES

Payroll for the Week of *(Current Date)*

	J. Carpenter	L. Carpenter	V. Grant	T. Hopkins	L. Neese	P. Moore	E. Morales	H. Selinger	G. Warner	TOTAL
Hrs. Wkd.	40.00	39.00	40.00	40.00	40.00	38.00	40.00	40.00	40.00	357.00
Hrly. Rate	$ 10.75	$ 12.10	$ 9.50	$ 9.25	$ 10.20	$ 11.50	$ 12.00	$ 9.50	$ 12.00	$ 96.80
Reg. Pay	$ 430.00	$ 471.90	$ 380.00	$ 370.00	$ 408.00	$ 437.00	$ 480.00	$ 380.00	$ 480.00	$3836.90
OT Hours	4.00		1.00	2.00	5.00		6.00	4.00	8.00	30.00
OT Pay	$ 64.50	$	$ 14.25	$ 27.75	$ 76.50	$	$ 108.00	$ 57.00	$ 144.00	$ 492.00
TOT. GROSS	$ 494.50	$ 471.90	$ 394.25	$ 397.75	$ 484.50	$ 437.00	$ 588.00	$ 437.00	$ 624.00	$4328.90
LESS: Ded.										
Fed. Tax	$ 84.07	$ 80.22	$ 67.02	$ 67.62	$ 82.37	$ 74.29	$ 99.96	$ 74.29	$ 106.08	$ 735.91
S. S.	$ 37.83	$ 36.10	$ 30.16	$ 30.43	$ 37.06	$ 33.43	$ 44.98	$ 33.43	$ 47.74	$ 331.16
Ins. Opt.										
Health	$ 21.26	$ 20.29	$ 16.95	$ 17.10	$ 20.83	$ 18.79	$ 25.28	$ 18.79	$ 26.83	$ 186.14
Life	$ 5.93	$ 5.66	$ 4.73	$ 4.77	$ 5.81	$ 5.24	$ 7.06	$ 5.24	$ 7.49	$ 51.95
Dental	$ 9.89	$ 9.44	$ 7.89	$ 7.96	$ 9.69	$ 8.74	$ 11.76	$ 8.74	$ 12.48	$ 86.58
TOT. DED.	$ 158.98	$ 151.71	$ 126.75	$ 127.88	$ 155.76	$ 140.49	$ 189.04	$ 140.49	$ 200.62	$1391.72
NET PAY	$ 335.54	$ 320.19	$ 267.50	$ 269.87	$ 328.74	$ 296.51	$ 398.96	$ 296.51	$ 423.38	$2937.20

NOTE: Some figures may vary slightly because of rounding.

Inserting a Column

B & C ENTERPRISES

Payroll for the Week of *(Current Date)*

	J. Carpenter	L. Carpenter	V. Grant	T. Hopkins	L. Neese	P. Moore	E. Morales	H. Selinger	G. Warner	Data Clerk	TOTAL
Hrs. Wkd.	40.00	39.00	40.00	40.00	40.00	38.00	40.00	40.00	40.00	19.00	**376.00**
Hrly. Rate	10.75	12.10	9.50	9.25	10.20	11.50	12.00	9.50	12.00	5.60	**102.40**
Reg. Pay	430.00	471.90	380.00	370.00	408.00	437.00	480.00	380.00	480.00	106.40	**3943.30**
OT Hours	4.00		1.00	2.00	5.00		6.00	4.00	8.00		**30.00**
OT Pay	64.50		14.25	27.75	76.50		108.00	57.00	144.00		**492.00**
TOT. GROSS	494.50	471.90	394.25	397.75	484.50	437.00	588.00	437.00	624.00	106.40	**4435.30**
LESS: Ded.											
Fed. Tax	84.07	80.22	67.02	67.62	82.37	74.29	99.96	74.29	106.08	18.09	**754.01**
S. S.	37.83	36.10	30.16	30.43	37.06	33.43	44.98	33.43	47.74	8.14	**339.30**
Ins. Opt.											
Health	21.26	20.29	16.95	17.10	20.83	18.79	25.28	18.79	26.83	4.58	**190.70**
Life	5.93	5.66	4.73	4.77	5.81	5.24	7.06	5.24	7.49	1.28	**53.21**
Dental	9.89	9.44	7.89	7.96	9.69	8.74	11.76	8.74	12.48	2.13	**88.72**
TOT. DED.	158.98	151.71	126.75	127.88	155.76	140.49	189.04	140.49	200.62	34.22	**1425.94**
NET PAY	335.54	320.19	267.50	269.87	328.74	296.51	398.96	296.51	423.38	72.18	**3009.38**

NOTE: Some figures may vary slightly because of rounding.

Comparison Chart--AVE., MIN., MAX.

COMPARISON CHART

	Average	Smallest	Largest
Hours Worked	37.6	19.00	40.00
Hourly Rate	10.24	5.60	12.10
Regular Pay	394.33	106.40	480.00
Overtime Hours	4.29	0	8
Overtime Pay	70.29		144.00
TOTAL GROSS	43.53	106.40	624.00
Less: Deductions			
Federal Tax	75.40	18.09	106.08
Social Security	33.93	8.14	47.74
Insurance Options			
Health	19.07	4.58	26.83
Life	5.32	1.28	7.49
Dental	8.87	2.13	12.48
TOTAL DEDUCTIONS	142.59	34.22	200.62
NET PAY	300.94	72.18	423.38

NOTE: Some figures may vary slightly because of rounding.

Maintenance

B & C ENTERPRISES

Payroll for the Week of *(Current Date)*

	J. Carpenter	L. Carpenter	V. Grant	T. Hopkins	L. Neese	P. Moore	E. Morales	H. Selinger	G. Warner	Data Clerk	TOTAL
Hrs. Wkd.	40.00	40.00	40.00	40.00	40.00	38.00	40.00	40.00	40.00	19.00	**377.00**
Hrly. Rate	10.75	12.10	9.50	9.25	10.20	11.50	12.00	9.50	12.00	5.60	**102.40**
Reg. Pay	430.00	484.90	380.00	370.00	408.00	437.00	480.00	380.00	480.00	106.40	**3956.30**
OT Hours	4.00	2.00	1.00		5.00		6.00	4.00	8.00		**30.00**
OT Pay	64.50	37.36	14.25		76.50		108.00	57.00	144.00		**501.61**
TOT. GROSS	494.50	522.26	394.25	370.00	484.50	437.00	588.00	437.00	624.00	106.40	**4457.91**
LESS: Ded.											
Fed. Tax	84.07	88.78	67.02	62.90	82.37	74.29	99.96	74.29	106.08	18.09	**757.85**
S. S.	37.83	39.95	30.16	28.31	37.06	33.43	44.98	33.43	47.74	8.14	**340.03**
Ins. Opt.											
Health	21.26	22.46	16.95	15.91	20.83	18.79	25.28	18.79	26.83	4.58	**191.68**
Life	5.93	6.27	4.73	4.44	5.81	5.24	7.06	5.24	7.49	1.28	**53.49**
Dental	9.89	10.45	7.89	7.40	9.69	8.74	11.76	8.74	12.48	2.13	**89.17**
TOT. DED.	158.98	167.92	126.75	118.96	155.77	140.50	189.04	140.50	200.62	34.22	**1433.26**
NET PAY	335.54	354.35	267.50	251.04	328.74	296.51	398.96	296.51	423.38	72.18	**3024.71**

NOTE: Some figures may vary slightly because of rounding.

Projected Effects of 4.5% Raise

B & C ENTERPRISES

Projected Payroll with 4.5% Increase

	J. Carpenter	L. Carpenter	V. Grant	T. Hopkins	L. Neese	P. Moore	E. Morales	H. Selinger	G. Warner	Data Clerk	TOTAL
Hrs. Wkd.	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	40.00	**400.00**
Hrly. Rate	11.23	12.64	9.92	9.67	10.65	12.01	12.54	9.92	12.54	5.85	**106.97**
Reg. Pay	449.20	505.60	396.80	386.80	426.00	480.40	501.60	396.80	501.60	234.00	**4278.80**
OT Hours	4.00	2.00	1.00		5.00		6.00	4.00	8.00		**30.00**
OT Pay	67.38	37.92	14.88		79.88		112.86	59.52	150.48		**522.92**
TOT. GROSS	516.58	543.52	411.68	386.80	505.88	480.40	614.46	456.32	652.08	234.00	**4801.72**
LESS: Ded.											
Fed. Tax	87.82	92.40	69.99	65.76	86.00	81.67	104.46	77.57	110.85	39.78	**816.30**
S. S.	39.52	41.58	31.49	29.59	38.70	36.75	47.01	34.91	48.88	17.90	**367.33**
Ins. Opt.											
Health	22.21	23.37	17.70	16.63	21.75	20.66	26.42	19.62	28.04	10.06	**206.46**
Life	6.20	6.52	4.94	4.64	6.07	5.76	7.37	5.48	7.82	2.81	**57.63**
Dental	10.33	10.87	8.23	7.74	10.12	9.61	12.29	9.13	13.04	4.68	**96.04**
TOT. DED.	166.08	174.74	132.354	124.36	162.64	154.45	197.55	146.71	208.63	75.23	**1542.74**
NET PAY	350.50	368.78	279.33	262.44	343.24	325.95	416.91	309.61	443.45	158.77	**3258.38**
PREV. NET PAY	335.54	354.35	267.50	251.04	328.74	296.51	398.96	296.51	423.38	72.18	**3024.71**

NOTE: Some figures may vary slightly because of rounding. WHAT IF =

EVALUATION SHEET

Date Completed	Project	Grade
____________ Redo Y N Comments:	**Creating a Payroll Spreadsheet** ____ Main Headings Correct ____ Row Titles Correct ____ Column Headings Correct ____ Data Correct	______
____________ Redo Y N Comments:	**Using Spreadsheet Formulas for Figuring Payroll** ____ Correct Formulas Entered ____ Data Correct ____ Report Format Printed Correct ____ Printing Formulas	______
____________ Redo Y N Comments:	**Totaling Rows Without Dollar Signs** ____ Formula Correct for Totaling Rows ____ Integrity of Data Not Disturbed ____ Inserted Rows ____ Inserted $ Formatting	______

Student Name ______________________________ Class ____________

BIP/Simulations
Spreadsheet Evaluation Sheet

Date Completed	Project	Grade
________________ Redo Y N Comments:	**Inserting Columns** ____ Inserted Column ____ Data Correct ____ Integrity of Data Not Disturbed ____ Placed in Alphabetical Order	______
________________ Redo Y N Comments:	**Finding the AVE., MIN., MAX.** ____ Used the Proper Functions ____ Report in Proper Format ____ Titles and Headings Correct ____ Data Correct	______
________________ Redo Y N Comments:	**Performing File Maintenance Activities** ____ Data Changed Without Disturbing Integrity of Other Data ____ Printout Correct	______
________________ Redo Y N Comments:	**Using "What If" Projections** ____ New Data Entered Correctly ____ Deleted Unused Lines ____ Printout Correct	______

Student Name ________________________________ Class ______________

B & C
ENTERPRISES

Congratulations! You have been hired by B & C ENTERPRISES as a part-time data entry clerk. B & C ENTERPRISES is an advertising specialty agency. They supply imprinted calendars, pens, caps, jackets, business cards, forms, and business gifts. The company officers are Cecil Carpenter, president, and Lisa Neese and Leslie Carpenter, vice-presidents in charge of operations.

Other employees are Hershel L. Selinger, Joan Carpenter, Esther Morales, Patricia Moore, Tony Hopkins, Vicki Grant, Ginger Warner, and yourself.

You report for work at 1 p.m. each day Monday through Friday. The company's offices are located at 1234 Ambition Drive, Amarillo, Texas. Your primary responsibility is to maintain a spreadsheet file for the payroll using the system and software supplied by your company.

You work closely with Lisa Neese and Leslie Carpenter, who have joint responsibility for the monthly payroll for this company. They stress to you that the accuracy of a payroll is extremely important because each employee depends on his/her paycheck to be exact. They also remind you of the extreme importance of making a habit of backing up all files according to pay periods. This must be done because the payroll records must be retained by the company for certain periods of time for tax purposes and as general business practices and procedures.

Lisa and Leslie have prepared a list of payroll procedures for you to use as a reference until you get used to the payroll procedures.

B & C Enterprises

From the desk of L. Carpenter

To: Date Entry Clerk

Date: Current Date

Subject: Creating a Payroll Spreadsheet File

Create a new spreadsheet file named "Payroll." Format the amounts entered as dollars with no "$" sign. Make sure two places are left after the decimal point.

The title of spreadsheet should be (first line) B & C ENTERPRISES, (second line) Payroll for the Week of *(current date)*.

Please enter each employee's first initial and last name alphabetically in a separate column heading. You may have to divide the last name or adjust the column widths.

The row headings should be:

Hrs. Wkd.
Hrly. Rate
Reg. Pay:
OT Hrs.
OT Pay
TOT. GROSS
LESS: Ded.
Fed. Tax
S. S.
Ins. Opt.
Health
Life
Dental
TOT. DED.
NET PAY

Enter the following hourly payroll information about the employees:

J. Carpenter -	40 regular hours; 4 overtime hours; hourly rate -	10.75
L. Carpenter -	39 regular hours; hourly rate -	12.10
V. Grant -	40 regular hours; 1 overtime hour; hourly rate -	9.50
T. Hopkins -	40 regular hours; 2 overtime hours; hourly rate -	10.20
L. Neese -	40 regular hours; 5 overtime hours; hourly rate -	10.20
P. Moore -	38 regular hours; hourly rate -	11.50
E. Morales -	40 regular hours; 6 overtime hours; hourly rate -	12.00
H. Selinger -	40 regular hours; 4 overtime hours; hourly rate -	9.50
G. Warner -	40 regular hours; 8 overtime hours; hourly rate -	12.00

B & C Enterprises

From the desk of L. Carpenter

To:	Data Entry Clerk
Date:	Current
Subject	Using Spreadsheet Formulas for Figuring Payroll

In keying in each employee's salary, follow the company policy on the next page in figuring overtime work. To calculate overtime, B & C Enterprises pay one and a half times the regular rate. First, multiply the hourly rate by 1.5, then multiply the new hourly rate by the number of overtime hours worked.

(Hourly Rate x 1.5) x Overtime Hours

The following are the percentages to use in figuring the formulas for the deductions for each employee:

Federal Tax	17.00%
Social Security	7.65%
Health Insurance	4.30%
Optional Life Insurance	1.20%
Optional Dental Insurance	2.00%

Print the spreadsheet. Also print a copy of the formulas for me to verify.

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B & C ENTERPRISES

EMPLOYEE PAYROLL FORMULA POLICY

The employees are expected to write their own formulas for the payroll spreadsheet. The following formulas are suggested:

Regular Pay--The formula multiplies an employee's hourly rate times the number of regular hours worked.

Hourly Rate x Regular Hours = Regular Pay

Overtime Pay--The overtime rate is one and a half times the regular rate.

(Hourly Rate x 1.5) x Overtime Hours = Overtime Pay

Gross Pay--The formula adds the regular pay to the overtime pay.

Regular Pay + Overtime Pay = Gross Pay

Deductions--Each deduction is figured by multiplying the gross pay by the percent of the specific deductions.

Gross Pay x Specific Deduction = Amount of (tax, insurance, etc.) deduction

Net Pay--Determined by subtracting all the deductions from the gross pay.

Gross Pay - All Deductions = Net Pay

B & C Enterprises

From the desk of L. Neese

To: Data Entry Clerk

Date: Current

Subject: Totaling Rows

Set up a formula to total each row. Label the column "TOTAL".

The last printout looks a little bunched together. Insert a row before and after the section on deductions. Let me see a copy of this change. I think deductions are now easier to read.

First print the spreadsheet without dollar signs and then print another copy after changing the currency format to allow for the dollar sign ($) and two decimal places.

B & C Enterprises

From the desk of L. Neese

To: Data Entry Clerk

Date: Current

Subject: Inserting a Column

I have discovered that you have left out your own name. Since this is your first month on the job, your data have not been entered yet. You have worked 19 hours this past month. Your hourly rate for part-time employment is $5.60. Please insert your name in a column alphabetically.

Duplicate your formulas and allow the spreadsheet to recalculate automatically.

Prepare a print out.

B & C Enterprises

From the desk of L. Carpenter

To: Data Entry Clerk

Date: Current

Subject: Finding the Average, Minimum, and Maximum

I am doing some comparisons on past months' payrolls and I need the following:

The average of all rows.
The smallest amount of all rows.
The largest amount of all rows.

Remember your software has functions such as @AVG, @MIN, and @MAX. Prepare a table and label the column headings as follows: Average, Largest, and Smallest.

Use "Comparison Chart" as the title of the table.

Print a copy of the table.

B & C Enterprises

From the desk of L. Carpenter

To: Data Entry Clerk

Date: Current

Subject: Performing File Maintenance Activities

Make the following maintenance changes for two employees listed. Allow the software to recalculate automatically.

Make these final corrections and print the spreadsheet. Take it to one of the vice presidents for final approval. You will not do another payroll until this same day next month.

Change L. Carpenter to a 40-hour week and 2 overtime hours.

Change Hopkins to a 40-hour week with no overtime.

Print a copy of the revised spreadsheet.

B & C Enterprises

From the desk of L. Carpenter

To: Data Entry Clerk

Date: Current

Subject: Using "What If" Projections

Cecil, Leslie and I have been talking about implementing a 4.5% across the board raise for everyone at the end of this quarter. We decided that before we announced this we needed to project the hourly rates and see what the salaries will look like.

We have decided that we will figure each salary on a 40-hour week with the same amount of overtime.

Please prepare a spreadsheet reflecting these changes and add the net pay line of the last worksheet to compare the differences.

Business Information Processing

Desktop Publishing

Simulation

INSTRUCTIONS

This is a simulation prepared for Section V, Unit 3 of the *Business Information Processing Curriculum*. The simulation should be completed after the study of the reference materials in **Section V: Information Distribution**. Students should have studied and completed all written work for **Unit 3--Desktop Publishing**. The competency test following this unit should determine whether or not the students are ready for the hands-on simulation.

It is preferred that the majority of the activities in this simulation be performed on a computer. Your students will need access to a computer, a blank disk for data storage, and word processing, graphics, and desktop publishing software packages of your choice. It is assumed that you have spent time to acquaint the students with both the computer and software that they will use.

This simulation contains the following desktop publishing activities:

- Display Cards
- Membership Cards
- Rental Form
- Newsletter

SPECIFIC INSTRUCTIONS

Display Cards

Preparing display cards provides the student with an opportunity to use the line-drawing feature available on many electronic typewriters and, word processing and desktop publishing packages. If this feature is not available, the boxes may be drawn with a pen and ruler.

Avoid using ornate and hard-to-read fonts. Provide students with the opportunity to select font sizes that will fit within the boxes. If you have only small font sizes available, have the students enlarge the text on a copy machine.

Membership Cards

Students will be working with the same size boxes as in the first assignment. Encourage them to use different font sizes and styles; special print enhancements such as bold, italics, outline, or shadow; and condensed print. If condensed print is not available, students might prepare a larger card and reduce it on a copy machine.

You may require *advanced students* to rearrange the text on Side 1 of the membership card so that appropriate graphics can be added.

Rental Form

A rough draft copy of a rental form is provided for the students to modify. They should create a heading, rearrange the form in box format, and make revisions as indicated. The letterhead of the memo from Mr. Tarkington provides additional information that students can use in their headings. Graphics can be added.

Newsletter

Preparing a newsletter is a very complex and time-consuming job; however, the experience the students will gain is worth while. Students should plan the layout in detail before keying the text. The newsletter can be produced on one page with a minimum of graphics or expanded to two pages with numerous graphics and print enhancements. This would be an excellent opportunity for students to use a scanner for graphics to accompany the movies listed in the newsletter. Students must decide how many columns to use, whether to use justification and where to insert graphics.

If a column-layout feature is not available, students can arrange the entire text in one long column and then cut and paste it on a master sheet.

Remind the students of the following guidelines:

1. Do not crowd a page.
2. Leave an appropriate amount of white space.
3. Do not overuse print enhancement features such as underline, bold and italic.
4. Do not overuse mixed font styles.

Additional Suggestions for Advanced Students:

1. Have students go to a local video store to obtain a list of new releases and then write an announcement of these, or a critique of one of the movies, for the newsletter.

2. Have students obtain pictures for some of the movies from a newspaper or video store. Use a scanner to convert pictures to computer graphics or reduce them using a copy machine and use "cut and paste" in the newsletter.

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Materials Needed:

- Desktop publishing software program
- Graphics program
- Word processing program

Equipment Needed:

- Computer
- Mouse
- Hand-held scanner
- Printer (Laser)
- Copy machine

ANSWERS

Display Cards--Example Solutions

NOW
AVAILABLE

$.99
SPECIAL

**COMING
SOON!**

**NEW
RELEASE**

Membership Card--Example Solution

TEXAS COUNTRY'S BEST VIDEOS

Four Locations to Serve You

No. 1 No. 2 No. 3 No. 4
1161 Travis ** 794 M.L. King ** 9362 N. Congress ** 49 Riverside
555-1995 555-4978 555-2525 555-2642

SIDE 1, Membership Card

TCBV MEMBER

Name:

ID No.:

Date:

NOTICE: If this card is stolen, the club member is responsible for all movies and equipment rentals until TCBV is notified in writing.

SIDE 2, Membership Card

Rental Form--Example Solution

Texas Country's Best Videos

Member Rental Agreement

Last Name	First Name	
Address	City	ZIP
Home Phone	Work Phone	
Date of Birth	Driver's License Number	
Place of Employment	Major Credit Card Number	
Family Members		

I, THE UNDERSIGNED, AGREE TO THE FOLLOWING TERMS AND CONDITIONS OF THIS MEMBERSHIP:

1. Positive identification will be required for everyone using this membership to rent or purchase any merchandise.
2. Movie(s) and/or equipment will be returned in good condition within the required time, or the member will pay for repairs, replacements, or additional rental charges if rental items are lost, stolen, or destroyed. The member agrees to purchase such rental items at the store's retail prices.

Signature

Date

Students' solutions will vary. Their headings should be creative and well balanced. They should have most of the information shown.

Sample Newsletter

TEXAS COUNTRY'S BEST VIDEOS

Saul Tarkington, Owner
794 M.L. King • Austin, TX 78701-0915 • (512)555-TCBV

HAM 'N EGGS 'N MOVIES

March is Breakfast-at-the-Movies month. From 9 to 11 a.m., Monday through Friday, rent one movie and get one free! ALL movies are included in this offer.

NO VCR?

You can rent a VCR overnight from TCBV at the low, low rate of $5, or you can rent one for a full week for only $20. (A $150 deposit is required.)

FAMILY NIGHT AT THE MOVIES

Many families are scheduling one night each month to watch movies, eat hot dogs, chips, and popcorn, and enjoy being together. Why not bring your family to TCBV to make your movie selections? Consider some of these all-time favorites: *The Little Mermaid, Fantasia, The Wizard of Oz, The Sound of Music, Field of Dreams, Popeye, Annie,* and movie series such as *StarTrek, Indiana Jones, Superman, Rocky,* or the *Muppets*. Remember that you can pick up your favorite candy, soda and microwave popcorn at TCBV, too!

HAPPY BIRTHDAY TO YOU!

Let us do something **special** for you on that **special** day. Come in on your birthday and get a **FREE** one-day movie rental. You're a VIP at TCBV.

SEE YOU
(*Insert Holiday*)

All four TCBV stores will be open (*Insert Holiday*) afternoon from 1 to 5 p.m. Happy Holidays to everyone!

*1161 Travis ** 794 M. L. King ** 9362 N. Congress ** 49 Riverside*
Four Locations to Serve You

Evaluated to the satisfaction of the instructor.

BIP/Simulations
Desktop Publishing Evaluation Sheet

EVALUATION SHEET

Date Completed	Project	Grade
____________ Redo Y N Mailable Y N Comments:	**Display Cards** ____ Accuracy of Text ____ Correct Spacing ____ Correct Size of Cards ____ Readability of Fonts ____ Neatness	______
____________ Redo Y N Mailable Y N Comments:	**Membership Cards** ____ Accuracy of Text ____ Variety of Print Enhancements ____ Acceptable Placement of Text ____ Correct Size of Card ____ Neatness	______
____________ Redo Y N Mailable Y N Comments:	**Rental Form** ____ Accuracy of Text ____ Appropriate Use of Graphics in Heading ____ Balanced Placement of Heading Information ____ Boxed Format ____ Good Balance ____ Eye Appeal	______

Student Name ______________________________ Class ______________

BIP/Simulations
Desktop Publishing Evaluation Sheet

Date Completed				Project	Grade
____________				**Newsletter**	______
Redo	Y	N	_____	Accuracy of Text	
			_____	Multiple-Column Layout	
Mailable	Y	N	_____	Appropriate Use of Graphics	
			_____	Appropriate Amount of White Space	
			_____	Good Balance and Eye Appeal	
			_____	Appropriate Use of Font and Features	

Comments:

Student Name ______________________ Class ______________

TEXAS COUNTRY'S BEST VIDEOS

CONGRATULATIONS! You have just been hired for the position of office assistant for Texas Country's Best Videos, a locally owned chain of four video rental stores in Austin, Texas. In addition to renting video tapes, the TCBV stores also sell a variety of merchandise including soft drinks, candy, popcorn, posters, used movies, and tickets to area concerts.

Saul Tarkington is the owner and manager of the TCBV stores. There are four full-time employees and eight part-time employees working in the four retail stores. An executive secretary, Lorna Martinez, is in charge of all the business aspects of the company. Mr. Tarkington has been having all of the business forms, membership cards, store signs, labels, advertisement flyers, etc., printed commercially. However, he has recently purchased a new computer system and has decided to hire a part-time office assistant primarily to be in charge of desktop publishing. You have just been hired for this position and will be working from 2:30 to 5:30 p.m. on Mondays through Fridays and from 8 a.m. to noon on Saturdays. Ms. Martinez will be your supervisor.

TCBV

From the desk of Lorna Martinez

To: Office Assistant

Date: Monday

Subject: Product Cards

Attached are four samples of cards that are used with different products throughout our stores. When the supply of each card gets down to ten, I have been ordering more from the printer. You, of course, are now the "printer" for TCBV.

The cards are 3 1/2-inches wide and 2-inches high. Please create one original of each card. I suggest that you choose the largest font that will fit on the cards, one that is bold and easy to read. You may wish to place two cards to a page. Graphics may also be added.

Display Cards--Examples

NOW
AVAILABLE

COMING
SOON!

$.99
SPECIAL

NEW
RELEASE

TCBV

From the desk of Lorna Martinez

To: Office Assistant

Date: Tuesday

Subject: Membership Card

I will be in a meeting until 4:45 this afternoon. Will you work on a new membership card for TCBV? The information will remain the same as the attached card, but you may use different font styles, sizes, print enhancements, etc. The card is the same size as those you made yesterday--3 1/2 x 2 inches.

Be creative! I'll see you after the meeting.

TEXAS COUNTRY'S

BEST VIDEOS

Four Locations to Serve You

No. 1	1161 Travis	555-1995
No. 2	794 M.L. King	555-4978
No. 3	9362 N. Congress	555-2525
No. 4	49 Riverside	555-2642

SIDE 1, Membership Card

TCBV MEMBER

Name:
ID No.:
Date:

NOTICE: If this card is stolen, the club member is responsible for all movies and equipment rentals until TCBV is notified in writing.

SIDE 2, Membership Card

TCBV

From the desk of Lorna Martinez

To: Office Assistant

Date: Thursday

Subject: Member Rental Agreement

Mr. Tarkington is very pleased with your work. In fact, I have just received the attached memo from him specifically requesting that you prepare our member rental agreement.

Keep up the good work!

TEXAS Country's Best Video

MEMO

DATE: (Last Friday's Date)

TO: Lorna Martinez

FROM: Saul Tarkington ST

SUBJECT: Revision of Member Rental Agreement

Please tell our new office assistant how pleased I am with the work I've seen so far! By the way, we need to have our rental agreement form revised. I think our assistant can handle it. Here are some suggestions:

1. Add a creative and imaginative heading. Use different fonts, print enhancements, and appropriate graphics. Also include any other pertinent information.
2. Arrange the basic form in a box format. Be sure to provide adequate space for the customer to write the information. Delete, insert, and revise as indicated. The completed form should be well balanced and have good eye appeal.

The information must fit on 8 1/2- by 11-inch paper. Feel free to make any changes in fonts and print enhancements for the text.

jc

Attachment

MEMBER RENTAL AGREEMENT

First Name ____________________ Last Name ____________________

Add. ____ Zip ______________

Home Phone ____________________

Work Phone ____________________

Place of Employment ____________________________

Family Members ____

Lic. Number ______________ DOB ____________

Major Credit Card Number ________ Employee Initials ___

I, THE UNDER SIGNED, AGREE TO THE FOLLOWING TERMS AND CONDITIONS OF THESE MEMBERSHIP:

1. Positive identification will be required for everyone using this membercard to rent any merchandise.
2. Equipment and/or movie(s) will be returned in good condition within the required time or the member will pay for repairs, or additional rental changes if said items are lost, stolen, and destroyed. The member agrees to purchase such items at the store's retail prices.

SIGNATURE ____________________ DATE ____________________

TCBV

From the desk of Lorna Martinez

To: Office Assistant

Date: Thursday

Subject: Newsletter

At our last staff meeting, it was decided that we would begin publishing a monthly *TCBV* newsletter for customers to pick up in each of the four stores. I have written down some of the text of the newsletter for November and have jotted down some suggestions that were discussed at the meeting. However, it needs some spicing up.

Graphics need to be added and you may need to add additional information. Make the newsletter into three columns.

Suggestions:

1. Prepare a masterhead.
2. Include the four stores' addresses and telephone numbers in the heading or footer of the newsletter.
3. Use Month, Year for the date.
4. Use multiple-column layout.
5. Use graphics, boxes, lines, and print enhancements effectively.
6. Make the newsletter either one or two pages on 8 1/2- by 11-inch paper.

Text for Newsletter:

HAM 'N EGGS 'N MOVIES

(Use next month) is Breakfast-at-the-Movies month. From 9 to 11 a.m., Monday through Friday, rent one movie and get one free! ALL movies are included in this offer.

FAMILY NIGHT AT THE MOVIES

Many families are scheduling one night each month to watch movies, eat hot dogs, chips, and popcorn, and enjoy being together. Why not bring your family to TCBV to make your movie selections. Consider some of these all-time favorites: *The Little Mermaid, Fantasia, The Wizard of Oz, The Sound of Music, Field of Dreams, Popeye, Annie,* and movie series such as *StarTrek, Indiana Jones, Superman, Rocky,* or the *Muppets*. Remember that you can pick up your favorite candy, soda and microwave popcorn at TCBV, too!

HAPPY BIRTHDAY TO YOU!

Let us do something **special** for you on that **special** day. Come in on your birthday and get a **FREE** one-day movie rental. You're a VIP at TCBV!

NO VCR?

You can rent a VCR overnight from TCBV at the low, low rate of $5, or you can rent one for a full week for only $20. (A $150 deposit is required.)

SEE YOU (*Insert Holiday*)

All four TCBV stores will be open (*Insert Holiday*) afternoon from 1 to 5 p.m. Happy Holidays to everyone!

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Business Information Processing

Telecommunications

Simulation

INSTRUCTIONS

This is a simulation prepared for Section V of the *Business Information Processing Curriculum*. The simulation should be completed after the study of the reference materials in **Section V: Information Distribution.** Students should have studied and completed all written work for the Telecommunications unit. The competency test following this unit should determine whether or not the students are ready for the hands-on simulation.

This simulation contains the following telecommunication activities:

- Dealer List
- Fax Transmittal Form
- Bulletin Board Message
- On-Line Information Report
- Parts Needed

Note that the placement of the students' documents on their papers may be different from those printed in the answers. Placing frames around the documents slightly distorts the correct placement on a page and the amount that may be placed on a page.

SPECIFIC INSTRUCTIONS

General Telecommunications Information

An inexpensive communications component is available with Microsoft Works or 1-2-3 Works. School districts may have Info Access from GTE Electric Pages. Other reasonably priced communication software packages are available. Modems are available for approximately $100. Make sure the modem has at least a 1200 BAUD rate. The industry standard is Hayes compatible.

It is **not necessary** to have dedicated telephone lines. It costs less than $200 (a one-time fee) to have a diverter put on the existing telephone line. The diverter allows you to use an existing telephone line without someone in another part of the building interrupting the connection.

If telecommunication capabilities, including a modem and communications software, are available, on-line communication skills can be practiced. Several telecommunications services are available at a low cost. Two of them are:

GEnie Information Services
1-800-638-9636
$ 4.95/month flat rate

Star Text (In Dallas, Ft. Worth Area)
1-817-390-7905
$ 9.95/month flat rate

GTE Electric Pages
8505 Freeport Parkway
Irving, TX 75063
(214) 929-3000
$24 per year for ID

Prodigy Services Co.
1800 Bering Drive, Suite 130
Houston, TX 77057
(See Prodigy information sheet following Specific Instructions.)

Districts in Texas should contact Education Service Centers to learn more about the Electronic Information Transfer System (EITS) authorized by Senate Bill 650, 71st Legislature. The statewide system will include electronic mail, electronic bulletin boards, electronic conferencing, electronic databases, and workstation communication software.

The Texas Education Agency is expected to contract with The Higher Education Network (THEnet) for telecommunications and related services. Public school educators will have access to on-line library catalog, educational computer archives, public databases, and instructional hypermedia libraries. This network will support the national effort to link higher education with public education. Training and support will be developed by the Texas Center for Educational Technology at the University of North Texas.

Costs to be Budgeted

In addition to the annual fee for an identification number, budget for two hours of on-line time for the first month you connect so that you have sufficient time for learning. After that time, one hour per month is enough time to transmit students' files to electronic bulletin boards, communicate on the electronic mail system, or search for information electronically. This allotment will permit about 15 minutes per week of on-line time during the school year. GTE Electric Pages charges $15 per hour for on-line time. Therefore, approximately $200 per school year should be budgeted. Log on-line time so that you know what the charges will be.

Connect to the Satellite Office

If Electric Pages are available in the school district, access the Satellite Office electronic bulletin board using the following steps:

1. Connect
2. At the first command, type: Tele
3. At the next command, type: 4 (Satellite Office)
4. At the next command, type: SA (Student Activities)
5. At the next command, type: H (Listing of Individual Student Papers)

You will see office education students's writing classes posted for all to read and share. This electronic bulletin board is simply a place to share information.

Documents are generally prepared off-line in word processing, database and spreadsheet software packages and then exported so that they can be transmitted through the modem and telephone lines. This simulation requests students to prepare documents so they are ready to be exported using communication software.

Prior to beginning this simulation, you may wish to make arrangements with equipment/software vendors for demonstrations of facsimile machines and electronic mail packages.

Additional Activities

You may wish to have your students do some of the following:

1. Research charges for facsimile machine use for sending or receiving documents. Have students compare the services and the costs to other electronic mail services.

2. Research and prepare a list of on-line information services such as Prodigy and Compuserve. Make a framed, landscaped table of the information with the names of the services, the primary services they offer, costs for the services, and address and phone number.

3. Investigate telecommunications software simulations that are available--Electronic Mailbag and Windows and Telecommunications.

4. Take a field trip to a company that uses telecommunications.

Materials Needed:	**Equipment Needed:**
Communications software	Computer
Word processing software	Modem
	Access to a telephone line

PRODIGY INFORMATION SHEET

800 Plus Features

Investment/Financial

Market Activity from Dow Jones

- Stock quotes
- Portfolios
- Market Update
- Market Close

Services

- Broker On-line
- Credit/Loans
- Insurance
- Banking Services
- Investing
- Real Estate

Simulation

CEO--two week long business simulation game

News Information

- Economic Indicators
- Business News
- Industry News
- Consumer Reports

Bulletin Board

- Taxes
- Real Estate
- Investments
- Insurance
- Personal Finance
- Banking
- Home Business
- Careers

Consumer Reports

- News Tickler
- Exec. Chgs.
- Labor Issues
- Other Mkts.
- Taxes
- Foreign News
- World Wide
- Mkt. Info.

Educational

Kids of All Ages

- Grolier's Encyclopedia
- National Geographic
- The Club
- NOVA Science
- Music Charts

Younger Kids--4-11

- Storyteller
- Story World
- Weekly Reader
- Police Artist
- Krazy Kaptions
- Match-it
- Art Gallery

Older Kids--12-18

- NOVA Lab
- CEO game
- Madmaze
- Eureka Project
- Cookbook
- Smart Quiz
- Dow Jones
- Comp. Glos.
- Sci. News
- Ask Beth
- Cur. Events
- Natl/Reg.
- Timely
- Calendar

Family

Mom

- Spiegel--on-line
- Elec. Messages
- Food Club QA
- Guest Chef
- Regional News
- Health News
- Suncoast Video
- Consumer Rpt.
- Leggs--Hose
- Travel Focus
- Wooden Spoon
- Bank On-line
- Cookbook
- Tots to Teens
- US Stamps

Dad

- DOW Jones
- PCFNAM
- Parenting
- Headlines
- Sports
- Rd/Track
- Petworks
- Moneytalk
- Changing Times
- PC Flowers
- CEO
- Co. News
- Movies
- Golf
- Homelife

Travel

Travel Arrangements

- Airlines/Hotels
  - Car Rentals
- Tour Companies
- Cruise Info.
- Discounts
- Travel Agents

Travel Information

- **Experts**
  - Consumer Rpt.
  - Family Travel
  - Bus. Travel
  - Lux. Travel
  - Restaurant
- **Travel Focus**
- City Info
- Vacation Info
- Events
- Travel Club
- Travel topics
- Weather
- Ski Guide

Travel-Related Offerings

- Mailbox
- Bank On-line
- US Stamps
- National Geog.
- Swimware
- Encyclopedia
- Luggage
- Flowers

Rates

Plan	Monthly Rate	Cost
Month by Month	$12.95	$ 12.95 + tax
6 Month Membership	$10.95	$ 65.70 + tax
1 Year Membership	$ 9.95	$119.40 + tax
2 Years Membership	$ 8.33	$199.92 + tax

One month of FREE service before selecting payment plan. The monthly fee includes 30 FREE Personal messages per month, 25 cents per message thereafter.

ANSWERS

Dealer List

A T I's DEALER LIST

Name	Address	Dealer Code
Texas Trading Company	Route 3, Box 10268 Forney, TX 75126	K051310
Lake April Equipment	61101 Lake April Road Edna, TX 77957	K142240
Denton Tractor Inc.	2121 Center South Crockett, TX 75835	K032240
Douglas Equipment Co.	P.O. Drawer 494 Brenham, TX 77833	K033132
Flores Equipment	231 Calallen Road Corpus Christi, TX 78469	K551301
E & E Tractors	209 Embrey Street Balch Springs, TX 75180	K540350

Fax Transmittal Form-Sample

ATI

FAX TRANSMITTAL COVER SHEET

TO: ______________________________

FROM: ______________________________

SUBJECT: ______________________________

DATE: ______________ Number of pages including this cover sheet: ______________

______ For your information

______ For review and comments

______ Other ______________________

Special Instructions: ______________________________

____

____

If there are any questions regarding
this transaction, please contact:

____
Name Phone No. FAX No.

Please deliver document as soon as possible.

Bulletin Board Notice--Sample

THE ETHICS OF COMMUNICATIONS SYSTEM USE

Electronic mail, electronic bulletin boards, and database systems are not unlike any other media. There are guidelines which are acceptable for on-line behavior. All system users should follow these accepted conventions when communicating via the phone lines.

Rules for Ethical On-Line Behavior

1. Avoid profanity or vulgarity.
2. Avoid the pirating of commercial software.
3. Don't attempt to crash or otherwise harmfully penetrate any message system.
4. Don't publicly post malicious rumor or misleading information.
5. Don't use another person's password.
6. Avoid breaking existing federal, state, and local laws with your actions on-line.

On-line Information Service Request

Evaluated to the satisfaction of the instructor. The letter should be in good format and should include evidence of research of two on-line services.

E-Mail Parts Order

Should be in memo format and include a request for the information inquired about. Evaluated to the satisfaction of the instructor.

BIP/Simulations
Telecommunications Evaluation Sheet

EVALUATION SHEET

Date Completed	**Project**	**Grade**
____________	**Dealer List**	______

Redo Y N
Mailable Y N

_____ Accuracy of Text
_____ Accuracy of Field Names
_____ Acceptability of Printout

Comments:

____________	**Fax Transmittal Form**	______

Redo Y N
Mailable Y N

_____ Accuracy of Text
_____ Correct Spacing
_____ Acceptable Placement of Text

Comments:

____________	**Bulletin Board Message**	______

Redo Y N
Mailable Y N

_____ Accuracy of Text
_____ Correct Spacing
_____ Acceptable Placement of Text
_____ Neatness

Comments:

Student Name ______________________________ Class ____________

BIP/Simulations
Telecommunications Evaluation Sheet

Date Completed	Project	Grade
____________	**On-Line Information Report**	______
Redo Y N	_____ Document Formatting _____ Accuracy of Text _____ Sufficient Information	
Mailable Y N		
Comments:		
____________	**Parts Memo**	______
Redo Y N	_____ Accuracy of Text _____ Accuracy of Field Notes _____ Acceptable Printout _____ Format	
Mailable Y N		
Comments:		

783

Student Name ______________________________ Class __________

AGRICULTURAL TECHNOLOGIES INC.

Congratulations! You have been hired as an assistant communications clerk to aid in the handling of the electronic communications at Agriculture Technologies, Inc. Your immediate supervisor is Marlene Nolte. Agriculture Technologies, Inc. is managed by Roscoe Wharton.

Agricultural Technologies Inc. (ATI) is a small farm equipment dealership in a Texas farming community. The local company is affiliated with a major equipment manufacturer in Wisconsin. ATI sells farm equipment and supplies. In addition, they provide a service department for maintenance and repair of farm equipment.

ATI has an established computer system which has primarily been used for electronic database management tasks. All equipment and parts sold by the dealer are managed through the database system. The software for the database was provided by the equipment manufacturer in Wisconsin.

The manufacturer has just initiated a new electronic communications system so that dealers can:

- Place parts orders;
- Send electronic mail messages to people in the company, other dealers, or groups of dealers; and
- Get information about parts orders.

The software links Agricultural Technologies' computers directly to the manufacturer's main computer in Wisconsin.

Communications software uses a menu of options from which you choose what you want to do. Many tasks may be completed off-line without communicating with the host (or main) computer. In the off-line mode, the program allows the user to create electronic mail, stock orders, emergency and unit down parts orders, reports, and read mail.

To go on line, the host computer is connected to the dealer's computer. The on-line mode allows the user to transmit electronic mail, stock down orders, and make inquiries.

The electronic mail function allows the user to send or receive information to or from other farm equipment dealers. This feature provides the ability to :

- Inquire about parts or whole goods (equipment such as combines or tractors) that are hard to find;
- Sell parts or whole goods that are obsolete; and
- Ask other dealers questions.

However, it is necessary to decide to which group of dealers you will target the messages.

- One dealer
- Several dealers
- All dealers in the United States
- All dealers in Canada
- All dealers in both countries

A T I

From the desk of Marlene Nolte

TO: Data Entry Clerk

DATE: Monday

SUBJECT: Central Sales Region Database--Dealer List

Use the data below to create a new database for Texas Dealers in the Central Sales Region. This file will be transferred to your electronic mail system, merged with the manufacturer's current dealer database, and then transmitted to the dealers involved. Print out a copy in the table format before you send it, so you can edit it and have it approved for release.

A T I's DEALER LIST

Name	Address	Dealer Code
Texas Trading Company	Route 3, Box 10268 Forney, TX 75126	K051310
Lake April Equipment	61101 Lake April Road Edna, TX 77957	K142240
Denton Tractor Inc.	2121 Center South Crockett, TX 75835	K032240
Douglas Equipment Co.	P.O. Drawer 494 Brenham, TX 77833	K033132
Flores Equipment	231 Calallen Road Corpus Christi, TX 78469	K551301
E & E Tractors	209 Embrey Street Balch Springs, TX 75180	K540350

ATI

From the desk of Marlene Nolte

TO: Data Entry Clerk

DATE: Tuesday

SUBJECT: FAX Transmittal Form

We have just purchased a facsimile machine, Superfax Model TC. It is fully automatic and operates on a 24-hour per day basis. Our regular telephone number is (409) 253-1122. Our fax number is (409) 253-1214.

You will be responsible for monitoring its use in sending and receiving electronic information including pictures or complicated graphics. The FAX will also be used to send text when the computer is not available for electronic mail.

Please design a FAX transmittal form to serve as a cover sheet for information we transmit. Feel free to use appropriate graphics. The cover sheet should include the following:

Date
To
From
Subject
FAX No.
Phone No.
The number of pages being transmitted: _____

_____ *For your information*
_____ *For review and comments*
_____ *Other* ____________________

A note requesting the document to be delivered as soon as possible.

Transmitted by:

Special Instructions:

A T I

From the desk of Marlene Nolte

TO: Data Entry Clerk

DATE: Wednesday

SUBJECT: Bulletin Board Message

Please create an attractive display of the following message for the office bulletin board. Use borders, print enhancements, and any other graphics to call attention to it.

THE ETHICS OF COMMUNICATIONS SYSTEM USE

Electronic mail, electronic bulletin boards, and database systems are not unlike any other media. There are guidelines for on-line behavior. All system users should follow these accepted conventions when communicating via the phone lines.

Rules for Ethical On-line Behavior:

1. Avoid profanity or vulgarity.
2. Avoid the pirating of commercial software.
3. Don't attempt to crash or otherwise harmfully penetrate any message system.
4. Don't publicly post malicious rumor or misleading information.
5. Don't use another person's password.
6. Avoid breaking existing federal, state, and local laws with your actions on-line.

A T I

From the desk of Roscoe Wharton

TO: Data Entry Clerk

DATE: Thursday

SUBJECT: On-line Information Service Request

I have received an electronic mail message from Josh Flores, the dealer in Corpus Christi, asking for any information on on-line services such as Prodigy and Compuserve. Please research the on-line information services. Then select two of them and compare and contrast costs, the beneficial information we might use, and the available products from which we might benefit.

Compose a letter to the Corpus Christi dealer for my signature detailing the information you find. Send the letter to Mr. Flores through our E-mail system.

ATI

From the desk of Marlene Nolte

TO: Data Entry Clerk

DATE: Friday

SUBJECT: E-Mail Parts Order

Mr. Treywick, the service manager of Agricultural Technologies Inc., needs the following parts for upcoming repair orders. Please prepare an electronic mail inquiry to the main office to see if the parts are available and at what price we will be invoiced. Export your file into your communications software when you are ready to transmit it to the manufacturer.

Please check on the price and availability of the following parts. We need them by next Friday.

Record No.	Description	Part No.
2283	Pin	195351M1
2662	Clamp	230674M1
2640	Sprocket	230136M1
2604	Seal	228236M1
8073	Block	GR5057

TX 92CD05

BUSINESS INFORMATION PROCESSING
ADDENDUM

Jan Patton
Office Education
Curriculum Coordinator

Darlena Mahaffey
Office Education
Technical Writer

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To ensure education equity, this material
has been reviewed to eliminate
bias or stereotyping.

EDTC
Educational Development & Training Center
East Texas State University ● Commerce, TX 75429
1-800-356-3382

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Cindy Johnson, Student Worker

Office Education Products

from the Educational Development & Training Center

	Format Catalog No.
Test Builder Program	MS-DOS 3½—BOI-3203-TBP MS-DOS 5¼—BOI-3205-TBP MAC 3½—BOM-3202-TBP
Test Banks	For each course
Business Information Processing Simulations	BO-300-SIM
Microcomputer Applications Simulations	BO-301-SIM
Business Computer Applications Simulations	BO-302-SIM
Business Office Clerical/Business Office Services Simulations	BO-326-SIM
Office Administrative Systems Simulations	BO-306-SIM
Office Support Systems Simulations	BO-307-SIM
Office Education Quality Guide	BO-315-TG
Integrating Academic Principles into Office Education	Call for specific courses
Building Math Skills With Spreadsheets	JS-500-TG
Building Reading and Writing Skills Through Word Processing	JS-501-TG
Conquer the TAAS	LM-100-SM
Data Drill	MS-DOS 3½—JSI-3003-CS MS-DOS 5¼—JSI-3005-CS
Karl's 101 HandyHandouts	KD-100-HH
Mower Store	MS-DOS 3½—JSI-2003-CS MS-DOS 5¼—JSI-2005-CS APPLE 3½—JSA-2003-CS APPLE 5¼—JSA-2005-CS MAC 3½—JSM-2003-CS
Stop and Think Cards	Stop and Think Cards—GEN-100-STC Stop and Think Cards II—GEN-101-STC Stop and Think III—GEN-102-STC

Educational Development & Training Center
East Texas State University • Commerce, TX 75429
1-800-356-3382

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The reference section provides a listing and description of resources according to instructional areas to assist the instructor in selecting appropriate resources. Although the guide contains several products, it does not include all products available on the market. The absence of a product listing should by no means be considered as an indication of the product's inappropriateness or lack of quality. The descriptions used for each resource have been taken directly from catalogs and other promotional literature. The purpose of these descriptions is to aid the instructor in understanding the purpose of the product, its intended use and general price range.

These descriptions do not indicate an endorsement by the Educational Development and Training Center, East Texas State University, or the Texas Education Agency. Time limitations of this project did not afford opportunities to review products. Therefore, instructors are encouraged to secure copies of products on a preview basis before purchasing.

Business Information Processing

Computer Basics

Reference Books

Batch File and Macros Quick Reference
Que Development Group — Que
Features alphabetical command listings for fast learning and includes dozens of sample batch files and macros. $

Beginner's Guide to Printers
John G. Stephenson — Sams
Anyone interested in buying, maintaining, or operating computer printers—and improving their performance—needs this book. As a guide for the serious user this book demystifies laser printer type font basics, selection, and characteristics. $

Developing Windows Applications with Microsoft SDK
Brent E. Rector — Sams
Beginning and intermediate Windows users learn step-by-step how to program with the Windows 3.0 Software Developer's Kit. As an expert tutorial, it provides programmers with the techniques needed to develop efficient, effective, and productive Windows applications. $$

Exploring the UNIX System, 2nd Edition
Kochran and Wood — Sams
The book covers everything clearly and concisely—how operating systems work; how the UNIX file system is organized and how to create, copy, rename, and remove files; and much more. $$

Fastback Quick Reference
Que Development Group — Que
Instant reference to this high-performance file backup system. Explains commands and procedures for all users. $

Hard Disk Power with the Jamsa Utilities
Kris Jamsa — Sams
Teaches readers true fundamentals of hard disk organization and performance. Begins with an in-depth discussion on such topics as low-level formatting, controller types, and hard disk terms. Comes with the newly developed Jamsa Utilities to maximize hard disk performance and capability. $$

Hard Disk Quick Reference
Que Development Group — Que
Instant guide to the information necessary for top hard disk performance. Compact and easy to use. $

Introduction to Business Software
Que Development Group — Que
Ideal introduction to important business software! Covers the best-selling MS-DOS software programs and explains essentials of each application. $

Key to Reference Cost

$	0-25
$$	26-50
$$$	51-75
$$$$	76-125
$$$$$	126-199

Introduction to Personal Computers
Katherine Murray — Que
Perfect how-to text for beginning computer users! Features valuable survey of computer hardware and software and helps readers decide what purchases suit their needs. Also contains product comparisons, buyer's tips, and printer advice. $

MS-DOS PC Tutor
Que Development Group — Que
Includes excellent disk-based tutorial. Interactive exercises teach users how to load DOS, format disks, and manage files. $$

MS-DOS 5 Quick Reference
Que Development Group — Que
Alphabetical listings make information easy to find and covers EDLIN and DOS message information. $

MS-DOS 5 QuickStart
Que Development Group — Que
The best combination of step-by-step instruction, examples, and graphics. Explores all new DOS features, functions, and commands. $

Norton Utilities Quick Reference
Que Development Group — Que
Compact, fast answers to essential Norton Utilities operations. Alphabetical listings make information easy to find. $

PC Concepts: A Core Text for the Software Solutions Series
Nelda Shelton — Houghton Mifflin
Can be used as the core text for the Software Solutions Series—or on its own as an introduction to microcomputers. Either way, it gives students an effective foundation in PC functions, operations, and applications, so they can rapidly learn the skills they need to compete in business today. $

PC Tools Quick Reference, 2nd Edition
Que Development Group — Que
Instant guide to the essential commands and functions of PC Tools Deluxe. Covers disk backup, security, and compression. $

Q&A Quick Reference
Que Development Group — Que
Instant guide to all essential commands of Q&A. Compact and easy-to-use, with alphabetical listings by task. $

Q&A QuickStart
Que Development Group — Que
The best combination of step-by-step instruction, examples, graphics, and user feedback available. Best information on the Q&A file, write, and report capabilities. $

Que's Computer User's Dictionary, 2nd Edition
Que Development Group Que
Completely updated A-to-Z glossary of common computer terms! Over 200,000 already in print. Includes terms with tips and illustrations. A practical reference for home, school, or office. $

Que's MS-DOS 5 User's Guide, Special Edition
Que Development Group Que
Easy-to-use comprehensive guide for experienced users. Fast-paced instruction with powerful text editing tricks and batch file techniques. $$

Que's PS/1 Book
Katherine Murray Que
This all-in-one guide covers IBM's PS/1 from A-to-Z! Combines step-by-step instructions and comprehensive reference material. Tips and techniques help user get most out of the PS/1. The best guide for home, family, and small business use. $

SmartWare Tips, Tricks, and Traps, 2nd Edition
Andrew N. Schwartz Que
Hundreds of tips and hints for all the integrated applications. Features timesaving techniques for Project Processing. $$

The Best Book of Microsoft Windows 3
Carl Townsend Sams
Offers users an in-depth tutorial and reference that covers the product features. Basic steps, tutorial exercises, practical examples, screen illustrations, and advanced techniques for power users are all presented in an easy-to-understand, easy-to-reference format. $

The Big Mac Book, 2nd Edition
Neil J. Salkind Que
Complete Vendor Guide includes on-line services. Product comparisons, troubleshooting tips, and networking advice. $$

The First Book of Fastback Plus
Jonathan Kamin Sams
A great introductory guide to desktop file management. Users learn how to protect, back up, and retrieve damaged files. Step-by-step instructions lead users through practical procedures for file security, virus prevention, and efficient management. $

The First Book of LaserJet Printers
Gordon McComb Sams
The ultimate introduction to all Hewlett-Packard LaserJet printers. As the perfect maintenance and operation reference, the book provides definitive details on how to get started quickly, trouble-shoot problems, and how to maximize LaserJet performance. $

The First Book of Microsoft Windows 3
Nimersheim and Townsend Sams
Complete tutorial and step-by-step instructions show readers how to navigate, customize, and manage Windows 3 and the applications included in the Windows 3 package. Also shows how to use other popular Windows programs and how to run standard DOS applications in the Windows environment. $

The First Book of MS-DOS 5
Jack Nimesheim Sams
Combines Quick Steps lessons with end-of-chapter questions and answers for effective instruction. Explains functions, commands, and how to install DOS. Plus, the text includes tips on file management and more advanced programming with the latest features of new DOS version 5.0. $

The First Book of Norton Utilities
Joseph Wikert Sams
Each feature of the Norton Utilities is addressed here using a step-by-step approach to maximize user productivity. With two-color graphics and quick-reference tables, each chapter includes an overview and a Quick Steps section for specific tasks to make learning fast and easy. $

The First Book of PC Tools Deluxe: New Edition
Gordon McComb Sams
This is an excellent beginners guide to PC Tools Deluxe—the best selling DOS utility package. Step-by-step lessons take the reader through functions and fundamentals to maximize PC performance. $

The First Book of PC Tools Deluxe, 2nd Edition
Gordon McComb Sams
Covering through Version 6.0, the book focuses on the fundamentals of this popular DOS utilities package—and covers the new text retrieval, disk repair, backup, caching, and communications features. Includes business examples and Quick Steps tutorials. $

The First Book of Personal Computing
Wang and Kraynak Sams
A one-step guide to the purchase, operation, use, enjoyment, and maintenance of the personal computer. Provides a thorough discussion of software and hardware options and tells which products do what faster, cheaper, and easier. Includes a comprehensive glossary of computer terms. $

The First Book of PS/1
Kate Barnes Sams
Covers the software IBM has bundled in with the PS/1 and teaches users how to get the most from their hardware setup. The book explains Prodigy, Microsoft Works, Promenade, and how to begin programming with BASIC. $

The First Book of Windows: New Edition
Jack Nimersheim Sams
Completely updated to cover all the great features of this essential operating environment! Complete tutorial and simple instructions show readers how to navigate, customize, and manage Windows. Special information helps readers maximize the performance of Windows accessories. $

The Little Mac Book
Neil J. Salkind Que
Ideal companion to The Big Mac Book, 2nd Edition. Alphabetical topic listings make information easy to find. $

The Waite Group's Discovering MS-DOS
O'Day and The Waite Group Sams
Begins with a unique overview of operating systems. Explains commands and then shows how to use MS-DOS to produce letters and documents. Detailed instructions are included on how to create, name, and manipulate files. $

The Waite Group's Discovering MS-DOS, 2nd Edition
O'Day and Henderson Sams

Has been completely updated to cover the latest version of DOS. Beginning with an overview of operating systems, the book explains all DOS functions such as batch files and the DOS shell. Readers then learn how to create, name, and manipulate files, as well as sort and find data quickly. $

The Waite Group's Understanding MS-DOS, 2nd Edition
O'Day, Angermeyer, Henderson,
and The Waite Group Sams

Readers with little or no DOS experience will appreciate the easy-to-understand treatment of fundamentals such as formatting disks, copying and naming files, and organizing tree-structured directories. More advanced topics such as redirection, filtering, and using batch files are also discussed. $

Using Carbon Copy Plus
Walter Bruce Que

Demonstrates the basics of remotely sharing keyboards, disks, and programs. The only reference guide available on this remote communications software. $

Using Microsoft Windows 3, 2nd Edition
Ron Person and Karen Rose Que

Features numerous screen shots and illustrations and combines tutorials, examples, and reference material in the Que tradition. Also contains Windows Shopping Catalog and thorough troubleshooting guide. $

Using MS-DOS 5
Que Development Group Que

Easy-to-use guide for everyday users—mixes examples with productivity tips. Extras add value: Tips, hints, warnings, error messages, and Command Reference tables. Complete coverage of the DOS 5 shell. $

Using Norton Utilities
Alan C. Elliott Que

Troubleshooting tips for the most efficient security, data retrieval, and hard disk performance. Includes a glossary of disk recovery and disk management terms. $

Using OS/2
Halliday, Minasi, and Gobel Que

Features basic and expert coverage of the OS/2 Presentation Manager and efficient management methods for the OS/2 environment. $$

Using PC DOS, 3rd Edition
Chris DeVoney Que

Features hands-on exercises to ensure productivity. Guide to hierarchical directories and batch files. $$

Using PC Tools Deluxe
Walter Bruce Que

Ensures users of top disk backup, security, and compression performance. Packed with practical examples and screen shots. Highlighted tips, tricks, and cautions. $

Using Your Hard Disk
Robert Ainsbury Que

Expert DOS user tips for organization, file management, and security. Disk features over 14 great utilities that improve computer performance. $$

Windows 3 Quick Reference
Que Development Group Que

Instant reference to all vital Windows fundamentals. Features alphabetical command listing to make information easy to find. $

Windows 3 QuickStart
Person and Rose Que

Emphasis on examples and step-by-step instruction and covers linking Excel, Word, and PageMaker for greater efficiency. $

Texts

A Quick Guide To DOS
Dill South-Western

Provides comprehensive instruction for DOS, the industry standard operating system for IBM PCs and compatibles. Students learn about internal and external commands, directories, file management, batch files, and more. $

Computer Applications: Building Skills for School or Work
Debra Wendt West

A collection of interesting, challenging practice applications will help your students extend and perfect their computer skills! All the activities in Computer Applications are generic and can be used with almost any software. $

Computer Concepts
Shelly, Cashman, & Waggoner South-Western

This full-color, up-to-date text offers a balanced treatment of micro and mainframe technologies and contains 15 chapters with concise chapter summaries, review questions, controversial issues for discussion, and research projects for enrichment. $$

Computer Confidence: A Challenge for Today
Clark and Oswalt South-Western

Newly revised and completely reorganized for improved instruction, this full-color text and courseware package introduces junior-high students to basic computer literacy while it helps them discover uses for computers in their own lives. $

Computers and Information Processing: Concepts and Applications
Clark, Allen, and Klooster South-Western

Provides a sound information processing base on which to add available supplements to create a truly versatile and integrated package. $$$

Computer Literacy Through Applications
Kurshan, November and Stone Glencoe

An ideal balance of activities and applications on and off the computer completely involves students of every ability and, this is the only program you'll find with complete software support. $$

Computers for Managing Information

Bergerud and Keller Regents/Prentice Hall
$$

Computers: Tools for Today

Hardman, Melnyk and Mandell West
Available in three versions, it teaches microcomputer applications, computer literacy, and computer programming specifically for the computer in your school. Whether your students work on Apple IIs, IBMs, or Macintoshes, they will find it easy to practice all the lessons in the texts. $$

Computing Today

Mandell, Basinger, and Fiscus West
Divided into three sections, Computing Today covers: Microcomputer Applications, Computer Literacy, and BASIC Programming. With this well-organized approach, your students will quickly gain computer confidence and proficiency. $$

Hard Disk Management

Gookin Regents/Prentice Hall
Presents practical instruction on organizing and managing a hard disk. $

Hypergraphics for Use with Computer Concepts

South-Western
Covers the 15 chapters of Computer Concepts and uses color graphics, animation, and interactivity to present content from the textbook. $$$$$$

Increasing Your Productivity with DOS

Rick Williams Glencoe
Students will learn all about DOS, including how to set up files, create directories, and format disks. Through the use of the Student Data Disk, students master steps in a logical progression and are given the opportunity to measure their progress through practice and challenge exercises. $

Introduction to Information Processing, 4th Edition

Robichaud, Muscat, and Hall Glencoe
Ideal for either a one-year or half-year introductory course in data/information processing, this program is especially designed for teachers and students who are new to the field. This edition offers a greater emphasis on microcomputers and software applications. $

Microcomputer Business Applications

Instructional Materials
Job sheets and accompanying data disks coincide with APPLEWORKS and DESKMATE software. Covers electronic filing, personnel records management, accounting, inventory control, financial records management, communications, and planning. Appropriate for all business, office, and marketing programs. $$

Microcomputers: Concepts, Skills and Applications

Flynn and Mandell West
Designed for versatility, this textbook of generic microcomputing essentials combines with any of the five software-specific Computer Skills Resource Guides to accommodate any classroom situation. This flexible supplement package gives you the freedom to change your software at any time. $

PC Power: Microcomputer Applications

Klemin and Harsha Glencoe
A text-software program that supports a broad-based course in microcomputer concepts and applications. It provides students with the most complete hands-on PC training. $

Understanding Computers Through Applications

Kurshan, Morse, and November Glencoe
An innovative entry-level course for computer applications that combines "air-quality" video, commercial software, hands-on activities, and a thorough Teacher Guide to make computer use more relevant and exciting for all sudents.
In Press

Understanding Microcomputers

Instructional Materials
Basic computer literacy for those with no computer experience. Covers choosing a computer system and selecting, buying, and using computer hardware and software. $

Windows: Quick Start, Version 3

Bergerud and Busche South-Western
Designed as a supplement to teach the use of Microsoft Windows 3.0 in an applications software course. Also appropriate for use as a stand-alone in a short-term or seminar course. $

Text Workbooks

Computer Concepts with Computers and Information Processing: Concepts and Applications

Clark, Allen, and Klooster South-Western
Provides a sound information processing base on which to add available supplements to create a truly versatile and integrated package. $$$

Help with Computers, 2nd Edition

June Atkinson Glencoe
Newly revised edition provides greater emphasis on the various kinds of business and personal software as well as various ways of entering data, such as mice and scanners. Other topics include what computers can and cannot do; computer ethics and security; and computers in home, school, and work. $

Learning with Hypercard

Hofmeister and Rudowski South-Western
Has 31 units, each divided into a main project and five additional projects dealing with the same skills. Each main project is broken into steps in which four or five new skills are taught. $$

Macintosh: Quick Start

Chochran South-Western
Covers the basics of how to use the Macintosh in just 10 one-hour sessions. When they finish, students will know the steps needed to work on any Mac—Mac Plus, SE, Classic, or LC—and they will feel comfortable using it. $

Videos

Amy D. Wohl Speaks on End-User Computing

Wohl South-Western

Allows you to see and hear how the office of today evolved and what the future holds for office technology. $$$$

Computer Visions—A Video Excursion Into the World of Computers

IA Associates South-Western

A three videocassette program to aid development of computer literacy. It features 13 segments covering basic computer terms and concepts; the information processing cycle —input, processing, output, and storage; and the role of computers in our technological society. $$$$$$

Hello PC

Teaching Aids Inc.

An easy-to-watch and learn system that makes it one of the most widely used methods of computer training today. See how to begin operating your PC, care for disks, reading of disks. $$

How to Master the Macintosh Computer System 7.0

MarkED

Series of three videos. $$

Insight Into Office Automation

Saffer South-Western

An MLS videotape/text package that provides a basic foundation in each of the five technologies—data processing, word/information processing, communications, image/voice processing, and voice processing. $$$$$$

Introduction to HyperCard 2.0, HyperCard: Video 1

MacAcademy

Creating cards, stacks, fields, backgrounds, graphics, menus, tools, home stacks, and basic Hypertalk scripts are taught. $$

Introduction to HyperCard 2.0, Hypercard: Video 2

MacAcademy

Scripting, layering, handlers, special buttons, user defined functions, objects, tracking script, and X commands are taught. $$

Introduction to HyperCard 2.0, HyperCard: Video 3

MacAcademy

Stack kit, power tools, power menus, pallet maker, inventory cards, editing cards, reports, and resource mover are taught. $$

Learning DOS

Teaching Aids Inc.

Shows you how to use DOS (Disk Operating System); 3.3 and earlier log-on drive and set time and date; use DIR (directory) commands; how to format, copy, and erase discs; how to name, copy, rename, and delete files. You work through step-by-step examples. $

MacProject II: Video 1

MacAcademy

You will learn: what a project is, sequencing, editing the chart, estimating, time durations, finding the critical path, and attaching information to tasks. $$

MacProject II: Video 2

MacAcademy

You will learn: allocating resources, creating a histogram, balancing resources, budgeting the project, creating subprojects, typing multiple projects together, using the chart, creating reports, and working with resolve. $$

Mary M. Ruprecht Speaks on End-User Computing

Ruprecht South-Western

Developed by a leading office technology consultant, explains the evolution of end user tools in the computerized business environment and illustrates the impact of this technology on society, business, and individuals. $$$$$$

Square One: An Introduction to Computers

Teaching Aids Inc.

Whether you realize it or not, computers have become an integrated part of everyone's life. Computer circuitry is now found in the cars we drive, the stores where we shop and in most of today's businesses. $$$

Where's the Any Key: How to Use Computers to Automate Your Office

Teaching Aids Inc.

This comprehensive video is the ideal way to introduce computers to beginning business students, existing office staff, management planning seminars or just for anyone who wants to know how computers can improve their efficiency. $$$$

Your First Computer

Teaching Aids Inc.

Shows and explains how a computer can work for you, the main parts of the computer (CPU, monitor, keyboard, modem, mouse, printer), how computers store and retrieve information, floppy and hard drives, differences between hardware and software, and the best buying decisions for your needs. $

Software—MS-DOS, Macintosh, Apple

Applications for Your Computer and You

Groneman and Jaderstrom South-Western

Designed for microcomputer applications or computer literacy courses in grades 7-10, this text-workbook can be used with virtually any brand of computer. Students can practice the skills they've already learned from computer software tutorials or instruction manuals. $$ MS, MAC, AP

Computer Applications and Concepts

Groneman and Jaderstrom South-Western

Gives students hands-on practice completing computer applications involving business, school, and personal situations. $$ MS, MAC, AP

Computer Explorations for Business
Goldman and Furjanic Glencoe
Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphics tool. The program material is designed for 12 to 15 hours of instruction.
$$$$$$ MS, AP

Computer Literacy Through Applications
Kurshan, November and Stone Glencoe
An ideal balance of activities and applications on and off the computer completely involves students of every ability. This is the only program you will find with complete software support. $ MS, AP

Hard Disk Management
Gookin Regents/Prentice Hall
Presents practical instruction on organizing and managing a hard disk. $ MS

Increasing Your Productivity with DOS
Rick Williams Glencoe
Students will learn all about DOS, including how to set up files, create directories, and format disks. Through the use of the Student Data Disk, students master steps in a logical progression and are given the opportunity to measure their progress through practice and challenge exercises.
$ MS

PC Power: Microcomputer Applications
Klemin and Harsha Glencoe
A text-software program that supports a broad-based course in microcomputer concepts and applications. It provides students with the most complete hands-on PC training.
$$$$$$ MS, MAC, AP

Understanding Computers Through Applications
Kurshan, Morse, and November Glencoe
An innovative entry-level course for computer applications, that combines "air-quality" video, commercial software, hands-on activities, and a thorough Teacher Guide to make computer use more relevant and exciting for all students.
In Press MS, MAC, AP

Other

MS-DOS 5 QueCards
Que Development Group Que
Speedy, efficient, and convenient command guide for beginning users. Spiral bound with FREE built-in easel. $

The World of Computer Wall Charts
Teaching Aids Inc.
Titles are: Terms, Terms, Terms; Protection Against the Elements; Portrait of the Peripherals; A Peek Inside a Micro; Anatomy of a Disk; It's As Basic As 1-2-3; ...But What Can It Do?; Your Future In Computing; Computer In Everyday Life; and A Little Bit of History. $$

Transparencies for PC and MS DOS
Dictation Disc Company
Transparencies illustrate what you are describing so that your students can see what you are telling them to do. This saves valuable time. The transparencies enable each function to be taught more rapidly by pointing to illustrations. $225

Word Processing

Reference Books

10 Minute Guide to Q&A
Sams
Explains essential word processing and database operation in 15 to 20 quick exercises. Exploring merge functions and intelligent assistant operations, each exercise establishes a goal then offers a tutorial to complete that goal in 10 minutes or less. $

10 Minute Guide to WordPerfect 5.1
Murray and Sabotin Sams
This is the quickest way to learn WordPerfect 5.1. All essential editing, entering, moving, and copying text fundamentals are taught in 15 to 20 short lessons. Each lesson includes a clearly-defined goal and a short tutorial to reach that goal in 10 minutes or less. $

10 Minute Guide to WordPerfect for Windows
Katherine Murray Sams
Speed, efficiency, and effectiveness are hallmarks of this instant guide! WordPerfect's new word processor for Windows is introduced through 20 to 25 short lessons. Each lesson teaches the program's most important features—in 10 minutes or less. $

Applications for Microcomputer Software
Janet R. Wilson Regents/Prentice Hall
With challenging projects and case studies—for beginning through advanced word processing, spreadsheet, or database users—this volume can be used with any software and enhances students' problem-solving abilities using the microcomputer. $

Career Applications for Word Processing, 2nd Edition

Patricia A. Custer — Regents/Prentice Hall

Text trains students for careers in general business, insurance, financial, legal, and medical firms. It encourages proficiency through keyboarding and editing typical documents, using the format techniques and vocabulary of each career specialty. $

Communicating in Business & Industry, 2nd Edition

Thomas W. Comstock — Delmar

A concise, how-to presentation of verbal and nonverbal communication skills. Listening, reading, telephone and computer skills, job applications, and body language are addressed. Up-to-date coverage includes: fax and cellular communications, word processing & desktop publishing, time management, etc. $

Computer Explorations for Business

Goldman and Furjanic — Glencoe

Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphics tool. A telecommunications tool is simulated. Sophisticated equipment is not needed. $$$$$

Glencoe Word Processing: A Practical Guide to Concepts and Applications

Marianne Levin-Cohen — Glencoe

$

Increasing Your Productivity with WordPerfect 5.1

Haiduk and Laby — Glencoe

The best way to learn the fundamentals of WordPerfect is through hands-on, practical experience, and that's what your students get with this comprehensive step-by-step tutorial. Through the use of the Student Data Disk, students master steps in a logical progression. $

Information Processing: Concepts and Applications

Dennis P. Curtin — Regents/Prentice Hall

This brief overview introduces students to major core concepts they will encounter in virtually all software packages. Case studies in the Lab Manual on DOS. $

Introduction to Microcomputers Using PC-Type, PC-Calc, PC-File

J. Robert Buck — Regents/Prentice Hall

$

Introduction to Office Systems: An Abridgement of Word and Information Processing

Bergerrud and Gonzalez — Regents/Prentice Hall

$

Introduction to Word/Information Processing, 2nd Edition

Hensen, Sanders, and Mason — Glencoe

$

Mastering WordPerfect 5.1

Mary Campbell — Glencoe

Uses a mastery approach to teach WordPerfect Releases 5.0/5.1. Lessons are brief, each focusing on a single learning objective. As students achieve each objective, they master a new skill. Each new skill introduced builds upon the last skill mastered. $

Microcomputer Business Applications and Projects

Busche and Esbensen — Regents/Prentice Hall

Text enables readers to become comfortable with four application software areas: database management, word processing, spreadsheets, and business graphics and presents IBM computer-based activities. Contains extensive illustrations throughout. $

Microsoft Word 5.0 IBM, Easy Reference Guide

Morrison — South-Western

This compact reference guide provides a command summary for Microsoft Word and instructions for using these commands in a simple, quick, easy-to-use format. Commands are arranged by function, in alphabetical order, and are highlighted through the use of graphics. The reference guide is designed for students who are already familiar with Microsoft Word but who may need an instructional reference for executing the various commands. $

Microsoft Word 4.0 Macintosh, Easy Reference Guide

Morrison — South-Western

This compact reference guide provides a command summary for Microsoft Word and instructions for using these commands in a simple, quick, easy-to-use format. Commands are arranged by function, in alphabetical order, and are highlighted through the use of graphics. The reference guide is designed for students who are already familiar with Microsoft Word but who may need an instructional reference for executing the various commands. $

PC Power: Microcomputer Applications

Klemin and Harsha — Glencoe

A text-software program that supports a broad-based course in microcomputer concepts and applications. It provides students with the most complete hands-on PC training. $

Paradigm Reference Manual

Branchaw and Bowman — Paradigm

Designed primarily for use as a supplementary text for all titles in keyboarding, shorthand, office procedures, word processing applications, machine transcription, business English, and business communications. $

Quick Reference Guides

- ***DisplayWrite 4***
- ***Microsoft Word***
- ***MultiMate***
- ***MultiMate Adv. II & Ver. 4***
- ***Professional Write***
- ***WordPerfect 4.2***
- ***WordPerfect 5.0***
- ***WordPerfect 5.1***
- ***WordStar 6.0***

Dictation Disc Company

These software specific Quick Reference Guides are correlated to your book. Your students follow the illustrated instructions which virtually put their fingers on the correct keys. $

Reference Manual for the Office, 7th Edition

House and Sigler South-Western

A valuable reference for people engaged in office work, as well as an effective textbook for those preparing to enter the field. $

The Best Book of Microsoft Word for the Macintosh

Rob Krumm Sams

Covers all Word 4.0 features by showing how to create various types of documents. The book begins with the simplest and most commonly used functions and proceeds to complicated and sophisticated operations by applying them to specific hands-on examples. $

The Best Book of Microsoft Word for Windows

Richard Swadley Sams

An easy-to-read guide to help beginning users get up and running quickly. Comprehensive tutorials, margin notes, and summaries get you on the right track—and keep you there. All Word for Windows exciting features are covered. $

The Best Book of Professional Write and File

Wolf and Kraynak Sams

Newcomers to word processing and database management will discover the many features of these two powerful programs. Through complete examples and practical applications, this book shows how easy these programs are to understand and use. $

The Best Book of WordPerfect Version 5.0

Vincent Alfieri Sams

From formatting a simple letter to setting up time-saving macros, this book unravels all of the features and updates of Version 5.0. With detailed explanations, clear examples, and screen illustrations. First-time and advanced users alike will use this as their essential resource. $

The Best Book of WordStar, 2nd Edition

Alfieri, Revised by Wolenik Sams

Completely updated for WordStar Versions 5.5 and 6.0. Graphic icons point out new features such as pulldown menus, advanced page preview, and scalable fonts. Users also learn step-by-step through comprehensive tutorials. Includes a quick reference command guide! $$

The First Book of Microsoft Word 5.5, 2nd Edition

Heslop and Angeli Sams

Practical business examples combined with step-by-step instruction offer users a complete overview of Word 5.5. The book discusses advanced features such as macros and file export in an easy-to-follow manner. $

The First Book of Microsoft Word for Windows

Heslop and Angell Sams

The perfect introduction to this powerful, new word processor! Quick Steps tutorials, graphic icons, and an overview of advanced Windows features help readers produce professional documents. $

The First Book of PC-Write

Rebecca Kenyon, Ph.D. Sams

Provides a complete introduction to PC-Write and PC-Write Lite shareware word processing systems. Written with the beginner in mind, this book offers easy-to-understand instructions for basic operations—including document creation, editing, and text manipulation. $

The First Book of the Mac

Rose and Rose Sams

Here's the first word on the Macintosh, complete with all essential Mac information! Performance tips and techniques make sure Mac beginners get started quickly—and coverage of desktop publishing, spreadsheet, word processing, and HyperCard capabilities make them productive. $

The First Book of WordPerfect 5.1

Kate Miller Barnes Sams

Offers an easy-to-read, concise introduction for first-time users, as well as a handy reference for experienced users. It covers all the latest features of this newest release. Quick Steps, key notes, reference tables, and reviews are included to help guide the reader quickly through the text. $

The First Book of WordPerfect for Windows

Kate Barnes Sams

An excellent beginner's guide to WordPerfect's newest product. Easy-to-use Quick Step lessons take the reader step-by-step through the most important functions. Users then move on the more advanced subjects, such as automating WordPerfect with macros and formatting style sheets. $

Thomason Learning Series

Annette J. Thomason Houghton Mifflin

Texts in series: New Learning Lotus 1-2-3, Release 2.2 with coverage of Release 2.3; Learning WordPerfect 4.2; Learning WordPerfect 5.0; Learning WordPerfect 5.1; Learning Lotus 1-2-3; and Learning dBase III Plus. $

Using MacWrite

Mark Bibo Que

Quick Start tutorials ensure fast productivity. Features a convenient Quick Reference section and tear-out Command Chart. $

Using Microsoft Word 4: Macintosh Version

Bryan Pfaffenberger Que

Includes power user tips and keyboard shortcuts. Helps users optimize Word and offers practical design strategies. $

Using Microsoft Word 5.5: IBM Version, 2nd Edition
Bryan Pfaffenberger Que

A broad-based tutorial and reference for Microsoft's leading word processor! Highlighted by step-by-step Quick Start lessons. Has timesaving tips for stylesheets and integrating text with graphics. $

Using Professional Write
Katherine Murray Que

Full-featured approach to affordable word processing! Quick Start tutorials ensure improved word processing skills. Professional advice for macro creation and advanced printing techniques. $

Using WordPerfect 5
Charles O. Stewart III, et. al. Que

Classic Que best-seller on the basics of WordPerfect 5! Quick Start tutorials ensure mastery of macros, styles, and other features. Features tear-out Command Reference and introduction to Version 5 for 4.2 users. $$

Using WordStar, 3rd Edition
Steve Ditlea Que

Provides the latest tips and techniques for improved word processing! Easy-to-use tutorials and reference information for confident start-ups and includes icons for quick-key shortcuts. $$

Webster's New World Writer, Student Edition Book/Disk Package
Korenthal Association, Inc. Regents/Prentice Hall

$

Welcome to WordPerfect 4.2
CIMC

Includes getting started, bold, centering, auto indent, reveal codes, printing, cursor movement keys, text deletion features, margins, tabs, spacing, print styles, hyphenation, move, block, headers and footers, widows/orphans, page breaks, centering vertically, spell check, search, thesaurus, etc. $

Word Division Manual, 3rd Edition
Perry and Silverthorn South-Western

Provides the correct spelling and division of those words most commonly used in business writing. Over 20,000 words are included. $

Word and Information Processing: Concepts of Office Automation
Bergerud and Gonzalez Regents/Prentice Hall

$$

Word for Windows Made Easy
Katie Layman Regents/Prentice Hall

Text gives step-by-step instructions for each program feature—i.e., centering, searching, printing, linking files, macros, underlining, paginating, merging, thesaurus, sorting, etc. It provides screen illustrations, samples for formatting documents, chapter objectives and summaries. $

Word Processing Applications for Office Professionals
McKay and Hopkins Regents/Prentice Hall

$

WordPerfect 5.0/5.1: Easy Reference Guide
Giglia South-Western

This handy reference guide allows students to reference how to perform the various functions of WordPerfect 5.0 and 5.1 quickly and easily. Each function lists the keystrokes needed to complete the function in a step-by-step manner. With this reference guide, students no longer need to rely on their memories or a cumbersome technical manual. $

WordPerfect 5.1 in Business
Neil Salkind Sams

Complete with ready-to-use style sheets and templates for business use, this book/disk set helps users reduce the time eaten away by ordinary tasks. The disk includes samples for legal forms, contracts, business letters, reports, and more. $$

WordPerfect 5.1 Quick Reference
Que Development Group Que

Instant reference for vital operations. Offers alphabetical listings to make information easy to find. $

WordPerfect 5.1 QuickStart
Que Development Group Que

Features numerous illustrations to reinforce learning and step-by-step instructions demonstrate document production, pull-down menus, file merging, and mouse manipulation. $

WordPerfect 5.1 Tips, Tricks, and Traps
Stewart, Rosenbaum, and Shore Que

Power techniques for WordPerfect users! Features hundreds of timesaving techniques. Covers style, macros, equation editing, keyboard mapping, and merge commands. $

WordPerfect for Windows Bible
Baake-Kelly and Blodgett Sams

The complete reference to boosting WordPerfect performance within the Windows environment. Clear goal-oriented tutorials provide in-depth coverage of all the features so power users get a handle on just what they're working with. Plus, a cross-reference section helps users boost productivity. $$

WordPerfect for Windows QuickStart
Greg Harvey Que

Que's easy-to-use graphic approach to learning WordPerfect Windows! Excellent combination of step-by-step instruction, examples and graphics. Covers essential elements of creating, editing, and producing WordPerfect Windows documents. Award-winning illustrated format ideal for beginning users. $

WordPerfect PC Tutor
Que Development Group Que

The perfect book/disk WordPerfect learning tool! Features practical on-screen, hands-on exercises for fast productivity and step-by-step examples teach readers to create, edit, and print professional documents. $$

Texts

Office Information Systems: Concepts and Applications, 3rd Edition
Sharon Lund O'Neil — Glencoe
Continues to provide students with the knowledge and tools for the age of information in the most user-friendly way possible. For full-semester courses, the text provides in-depth knowledge of word processing as well as information systems. $

Office Procedures: Learning and Instruction
Olinzock and White — South-Western
Facilitates the development of the skills and knowledge necessary to plan, organize, and implement a successful office procedures program. $

Procedures for the Modern Office
Pasewark and Oliverio — South-Western
Designed to prepare students for a wide range of entry-level office jobs. Topics such as word processing, micrographics, and reprographics are discussed, since rapid developments in these fields are changing traditional office procedures. $

Understanding Microcomputers and Application Software
Bergerud, Busche, and Gonzalez — South-Western
Offers comprehensive, state-of-the-art coverage on everything from word processing to integrated software and desktop publishing. $$

Word Processing Applications and Exercises, 2nd Edition
Sandra Muehlman-Shortt — Regents/Prentice Hall
Text correlated with the updated 50 topics in Dennis P. Curtin's Word and Information Processing on Microcomputers Series. $

Word Processing Applications in Automated Offices
Annell Lacy Simcoe — Regents/Prentice Hall
Text demonstrates how to set up and input commands to create and generate text. It covers teleconferencing, electronic filing, optical character referencing, phototypesetting, telex and facsimile transmission. $

Word Processing Applications: Basic to Advanced
Platt and Gilson — Glencoe
Enables students to perfect their word processing skills. A complete range of functions is covered, from the simplest to the most advanced. Designed so that it may be used in advanced applications classes as well as in beginning classes. $

Word Processing on Microcomputers: Systems and Procedures
Dennis P. Curtin — Regents/Prentice Hall
$

Word Processing on the Job
Rosemarie McCauley — Glencoe
$

Word Processing Skills and Applications Using Wang Systems, 2nd Edition
Agnes Fricano Cecala — Regents/Prentice Hall
$$

Word Processing: Concepts and Careers, 4th Edition
Bergerud and Gonzalez — Regents/Prentice Hall
$

WordPerfect 5.0
CIMC
Includes getting started, underline, bold, centering, auto indent, reveal codes, printing, cursor movement keys, text deletion features, margins, tabs, spacing, print styles, hyphenating, move, block, headers and footers, widows/orphans, page breaks, centering vertically, spell check, search, etc. $

WordPerfect for Windows Made Easy
Katie Layman — Regents/Prentice Hall
Text covers the new WordPerfect for Windows software. It includes numerous practice exercises. $

Text Workbooks

101 Word Processing Exercises, 2nd Edition
Lloyd D. Brooks — Glencoe
A short program that easily adapts to any word processing curriculum. The 101 exercises cover the major word processing skills and are divided into eight sections. At the end of each section is an integrated reinforcement exercise to reteach major concepts. $

Advanced Word Processing Productivity: Exercises and Applications
Lloyd D. Brooks — EMC Publishing/Paradigm
This generic exercise book provides realistic practice using intermediate to advanced features of word processing programs. Students learn how to organize and complete a wide range of complex business documents. $

Advanced WordPerfect 5.0-5.1: Tutorial and Applications, Including Desktop Publishing
Sullivan — South-Western
Now students who know WordPerfect basics can learn how to use the advanced features of the world's number one word processing program. This tutorial presents the advanced commands in WordPerfect 5.0 and 5.1 in an easy-to-follow, step-by-step fashion and gives students time-saving tips and techniques. They will also learn how to avoid common problems. $

Business Skills Improvement Exercises, 2nd Edition
Barker and Lovern — South-Western
Focuses on improving students' basic office skills to prepare them for the world of work. One hundred exercises cover a broad range of office skills. Completion time: 20 hrs. $

Computer Applications for Business

Iris Blanc Dictation Disc Company

Introduces students to five computer skills through sequential application materials. The learner proceeds from basic to intermediate level. Introductory course—one-two semesters, word processing, spreadsheets, integration, desktop presentation. $

DisplayWrite 4: A Practical Approach

Woo and Troop South-Western

With the help of this practical text-workbook, even students with little or no word processing background will find IBM's DisplayWrite 4 easy to understand and use. Completion time: 30-40 hrs. $

DisplayWrite 4: Quick Start

Stacy and Varnon South-Western

For first-time users, this text-workbook is a great tool to help them get started in a short amount of time—even if they have never used a microcomputer. $

Documents for Keyboarding and Word Processing

Carol Dreger EMC Publishing/Paradigm

This word processing applications workbook is designed to provide students with challenging, realistic documents to practice all the functions of a word processing program. $

Editing Applications for Word Processing

VanHuss and Matthews South-Western

This intensive, activity-oriented text workbook takes a generic, conceptual approach—first to review basic word processing functions, then to teach advanced word processing concepts and functions. Students learn to apply the concepts and functions to the specific word processing software or electronic typewriter they have available. Composing at the keyboard and working from script and rough-draft copy and forms, students encounter realistic business documents. Completion time: 25-30 hrs. $

Insight Into Office Automation

Saffer South-Western

An MLS videotape/text package that provides a basic foundation in each of the five technologies. When combined, they create integrated office systems. This versatile approach works well in a traditional classroom setting as an independent text or supplement to any course involving the survey of office automation. $

Learning WordPerfect 5.0 and 5.1 for IBM and Compatibles

Iris Blanc Dictation Disc Company

Speeds up learning time with the step-by-simple-step method. The book explains why the function is used. Each new exercise reviews the previous concepts and introduces a new concept. $

Mactivities: Learning to Use the Macintosh Computer

Auvil South-Western

As first-time Macintosh users, your students learn to produce documents efficiently and quickly with this introductory guide. This spiral-bound text is divided into two parts: the first part covers the Mac's operating system; the second part guides students through the basics of word processing and paint and draw graphics. $

Microcomputers: A Practical Approach

Klemin and Harsha Glencoe

For use in one- or two-semester courses, Microcomputers provides generic applications for spreadsheet, database, graphing, word processing, integrated, and communications software. $

Microsoft Word on the Macintosh

Smith South-Western

This text-workbook is designed to guide students through the software in a step-by-step manner from very simple concepts to more complex. Students are introduced to one or two concepts in each lesson. With each new concept, students perform steps of the process on the microcomputer that relate to that particular topic. Objective quizzes and documents are included to reinforce concepts. $

Microsoft Word: Tutorial and Applications

Cluck and Arntson South-Western

By providing step-by-step directions, this practical text workbook leads students from simple concepts to complex functions. For continuity, several documents will be used by your students throughout the text-workbook. Completion time: 30-35 hrs. $$

Nicholson, Donovan & Brown— A Legal Word Processing Simulation

Lehman, Forde, and Lehman South-Western

Students work as senior word processing specialists in a major law firm. The realistic applications teach students already proficient with automated equipment to apply their skills. The program consists of 10 projects. Completion time for each project: 20-25 hrs. $

Q&A in Business

David B. Adams Sams

This complete book/disk set is packed with clear, concise instruction and ready-to-use business templates to make the Q&A database and word processing user more productive. $$

Skill Building Exercises for the Word Processor

Iris Blanc Dictation Disc Company

Book contains eleven lessons covering all phases of word processing. Each lesson provides intensive repetitive drills, constant cumulative review of word processing functions. Every lesson is presented in a graded, systematic, cumulative fashion. $

Skill Building Word Processing Exercises

Patricia A. Custer Regents/Prentice Hall

Text is correlated with the updated 50 topics in Dennis P. Curtin's "Word and Information Processing on Microcomputers Series." It applies skills to a variety of documents $

The Electronic Office and You: Word Processing Concepts

Boyce and Popyk Glencoe

$

The Word Processing Workbook

Margaret J. Hock Regents/Prentice Hall

$

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Transcription Skills for Information Processing: Incorporating
Schatz and Funk
Glencoe
Offers flexibility in structuring a training program to fit the needs of students preparing for stenographic, secretarial, clerical, word processing, and other occupations. Students learn how to efficiently operate dictation equipment and apply language-usage and other skills. $

Typing from Handwritten Copy
Dictation Disc Company
$

Using WordPerfect 5.0/5.1: Applications for Reinforcement
Anderson and Golightly
South-Western
Using this publication is designed to build skills in using WordPerfect software. $

Word Processing Applications in Practice, 2nd Edition
Meroney
South-Western
The second edition of the popular text-workbook develops proficiency with any brand of word processing software package. For use in conjunction with developers' training manuals, it gives students practice using the software to set up, format, and edit actual business documents. Completion time: 25-35 hrs. $

Word Processing Hands-On Exercises, 2nd Edition
Patricia A. Custer
Regents/Prentice Hall
$

WordPerfect 5.1 Quick Course
Eisch
South-Western
This easy-to-use text-workbook covers all the necessary functions of WordPerfect 5.1 in a quick 12-15 hours of instruction. $

WordPerfect 5.0/5.1: Tutorial and Applications, IBM Version
Eisch
South-Western
This practical text-workbook makes students proficient users of the 5.0 and 5.1 versions of the WordPerfect word processing package. Taking a conversational approach, it presents information in a logical step-by-step manner. Completion time: 30 hrs. $

WordPerfect for the Macintosh: Tutorial and Applications
Eisch
South-Western
This text-workbook makes students proficient users of WordPerfect for the Macintosh 2.0. Taking a conversational approach, it presents information in a logical step-by-step manner. Completion time: 30-35 hrs. $

Word Processing Hands-On Exercises, 2nd Edition
Patricia A. Custer
Regents/Prentice Hall
$

WordPerfect Made Perfectly Easy, 2nd Edition
Sharon Anne Fisher-Larson
Glencoe
Task oriented, eliminating extraneous theory and reading. Focuses on the tasks required by office personnel working with WordPerfect 5.1. Text comes with either a 5.25" or 3.5" disk. Clip art is included where the learner will perform those tasks that simulate the desktop publishing environment. $

WordPerfect: Quick Start
Stacy
South-Western
This publication gets first-time users up and running in the shortest time possible—even if they have never used a microcomputer. $

WordPerfect: Tutorial and Applications, Apple Version
Eisch
South-Western
Students gain proficiency with the Apple version of the widely used word processing package. It is divided into two sections—basic and advanced. $

WordStar Release 5.0 and 5.5: Tutorials and Applications, IBM Version
Graham
South-Western
This practical text-workbook presents the software in an easy-to-follow, step-by-step manner. It leads students from simple to complex functions. Completion time: 30-35 hrs. $

Working Your Way Through WordStar Release 4, 2nd Edition
Graham
South-Western
The word processing program is presented in a nontechnical, step-by-step style. Each lesson contains specific objectives, command instructions, recaps of commands, and both written and computer exercises. Completion time: 30-35 hrs. $

Videos

MacWrite II: Video 1
MacAcademy
You will learn components, filing, windows, page numbers, page setup, printing, setting tabs, preferences, title page, header box, selecting text, columns, and save as. $$

Microsoft Word: Video 1
MacAcademy
You will learn word processing tips, selecting, deleting, moving copy, style changes, font and sizing changes, using the ruler, setting margins and custom margins, creating tabs and tables, using spelling checker, using print preview, using page view, printing tips, using the glossary, and using key caps. $$

Microsoft Word: Video 2
MacAcademy
You will learn adding columns, tab leaders, headers and footers, glossary features, facing printed pages, table of contents, indexing, footnoting, outlining, creating a mail merge, use of tables and creating and using style sheets. $$

The LEARN PC Video Series WordPerfect 5.1

Regents/Prentice Hall

Videotapes clearly guide students step-by-step through each software package. Each video is divided into lessons that contain a series of easy-to-follow, hands-on procedures.The LEARN PC Video Series: Computer Literacy $$

The Video Basics of Word Processing

Teaching Aids Inc.

This video introduces the basic skills and key terms associated with the processing of words by computers. Exploring the many applications and services that word processing performs, this video presents numerous on-screen examples with follow along dialogue from real world settings. $$$$

WordPerfect

Teaching Aids Inc.

Shows you how to use easy help menus and features, special keyboard functions, create and save documents, how to edit, delete, and insert text, move around in a sample document, work through step-by-step examples. $

WordPerfect 5.1

Teaching Aids Inc.

Shows you how to use easy help menus and features; special keyboard functions; create and save documents; how to edit, delete, and insert text; move around in a sample document; work through step-by-step examples. $

WordPerfect: Video 1

MacAcademy

You will learn menus and commands, text manipulations, entering, selecting, deleting, document formatting, spelling checker, using the thesaurus, headline formatting, tab types and uses, importing graphics, and automatic page numbering. $$

WordPerfect: Video 2

MacAcademy

You will learn: formatting columns, footnotes and endnotes, headers and footers, table of contents, preparing indexes, outline preparation, using macros, mail merges, custom templates. $$

WordStar

Teaching Aids Inc.

Shows you how to use easy help menus and features; special keyboard functions; create and save documents; how to edit, delete, and insert text; move around in a sample document; work through step-by-step examples. $

Software—MS-DOS, Macintosh, Apple

Advanced WordPerfect 5.0-5.1: Tutorial and Applications, Including Desktop Publishing

Sullivan South-Western

Now students who know WordPerfect basics can learn how to use the advanced features of the world's number one word processing program. This tutorial presents the advanced commands in WordPerfect 5.0 and 5.1 in an easy-to-follow, step-by-step fashion and gives students time-saving tips and techniques. They will also learn how to avoid common problems. $$ MS

Application Using The Personal Computer

Groneman and Owen-Jaderstrom South-Western

Offers a wide variety of business applications for students who have some proficiency with applications software programs. $$ MS, AP

Certify! Computer-Based Training Reporting System

Teaching Aids Inc.

A powerful testing tool that helps you evaluate the ability of nearly all PC users. With Certify! it is quick and easy to do. Students will be led through a test of their skills on the software they need to know. It provides an accurate simulation of the actual software being tested. $$$$$ MS

Checkmate—Production Document Check

Haugo, Hausmann, and Jackson South-Western

Checking student keyboarding/typewriting documents completed from Century 21 is now an easy matter—automatically. Working with commercial word processors, this product has two ways to assist in your word processing and keyboarding courses. $$$$$$

Computer Explorations for Business

Goldman and Furjanic Glencoe

Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphics tool. A telecommunications tool is simulated. Sophisticated equipment is not needed. $$$$$ MS, AP

Dallas Oil, Inc., An Administrative Secretary Simulation, 2nd Edition

Dickinson South-Western

Students will learn about corporate structure and will gain a better understanding of how big business operates. Students will be given specific tasks to complete and will be guided by the procedures manual, which includes a glossary of corporate and oil terms. Completion time: 20 hrs.

$ MS, AP

DisplayWrite 4: A Practical Approach

Woo and Troop South-Western

With the help of this practical text-workbook, even students with little or no word processing background will find IBM's DisplayWrite 4 easy to understand and use. Completion time: 30-40 hrs.

$$ MS

Editing Applications for Word Processing

VanHuss and Matthews South-Western

This intensive, activity-oriented text-workbook takes a generic, conceptual approach—first to review basic word processing functions, then to teach advanced word processing concepts and functions. Students learn to apply the concepts and functions to the specific word processing software or electronic typewriter they have available. Composing at the keyboard and working from script and rough-draft copy and forms, students encounter realistic business documents. Completion time: 25-30 hrs. $$ MS, AP

Mactivities: Learning to Use the Macintosh Computer
Auvil South-Western
As first-time Macintosh users, your students learn to produce documents efficiently and quickly with this introductory guide. This spiral-bound text is divided into two parts: the first part covers the Mac's operating system; the second part guides students through the basics of word processing and paint and draw graphics. $ MAC

Mastering WordPerfect 5.1
Mary Campbell Glencoe
Uses a mastery approach to teach WordPerfect Releases 5.0/5.1. Lessons are brief, each focusing on a single learning objective. As students achieve each objective, they master a new skill. Each new skill introduced builds upon the last skill mastered. $ MS

Microsoft Word: Tutorial and Applications
Cluck and Arntson South-Western
By providing step-by-step directions, this practical text workbook leads students from simple concepts to complex functions. For continuity, several documents will be used by your students throughout the text-workbook. Completion time: 30-35 hrs. $$ MS

Nicholson, Donovan & Brown—A Legal Word Processing Simulation
Lehman, Forde, and Lehman South-Western
Students work as senior word processing specialists in a major law firm. The realistic applications teach students already proficient with automated equipment to apply their skills. The program consists of 10 projects. Completion time for each project: 20-25 hrs. $ MS, AP

PC Power: Microcomputer Applications
Klemin and Harsha Glencoe
A text-software program that supports a broad-based course in microcomputer concepts and applications. It provides students with the most complete hands-on PC training. $ MS, MAC, AP

Power Training From ATI
Teaching Aids Inc.
Teach yourself to use dBASE III Plus, dBase IV, Display Write 4, DOS 3.3, DOS 4.0, Louts 1-2-3 (2.2), MicroSoft Word (5.0), MultiMate Adv. II, OS/2, PC Tools, PageMaker, SuperCalc 5, Windows 3, WordPerfect (5.0), WordPerfect (5.0) Adv., WordPerfect (5.1), PC/AT, PC/XT, and PS/2. $$$ MS

Skill Building Word Processing Exercises
Patricia A. Custer Regents/Prentice Hall
Text is correlated with the updated 50 topics in Dennis P. Curtin's "Word and Information Processing on Microcomputers Series." It applies skills to a variety of documents $ MS

The Regal Crown Hotel: An Advanced Word Processing Simulation
Dill and Van Sickle South-Western
This realistic text workbook provides practice and reinforcement for functions found in most commercial word processing packages. Completion time: 15 hrs. $ MS, AP

The Secretary—Carrollwood Industries, Inc., 3rd Edition
McIntosh and Welter South-Western
Employs students with *Carrollwood Industries*, a leading franchisor of health and fitness products. Completion time: 20-24 hrs. $$ MS, AP

Wall Street Office Systems: A Microcomputer Simulation
Olinzock, Santos, and Sharp South-Western
This is the first office procedures simulation to cover all major electronic office systems: word processing; databases; spreadsheets; daily planner/calendar; a public database similar to CompuServe; electronic mail; and disk utilities. $$$ MS

Word for Windows Made Easy
Katie Layman Regents/Prentice Hall
Text gives step-by-step instructions for each program feature—i.e., centering, searching, printing, linking files, macros, underlining, paginating, merging, thesaurus, sorting, etc. It provides screen illustrations, samples for formatting documents, chapter objectives, and summaries. $ MS

Word Processing Applications and Exercises, 2nd Edition
Sandra Muehlman-Shortt Regents/Prentice Hall
Text correlated with the updated 50 topics in Dennis P. Curtin's Word and Information Processing on Microcomputers Series. It offers 100 realistic business exercises that provide skill-building. $ MS

Word Procesing Tests on Diskette—
DisplayWrite 4
MultiMate
Microsoft Word
Professional Write
Word Perfect
WordStar 6.0

Dictation Disc Company
Evaluation test letters on disks. Each test covers two to three functions to pinpoint deficiencies and key in on those functions that require remedial work. The tests are sequential and cumulative. They tell you the competency level of each student. Each test is given a point scale and time frame. Tests may be used with any book. $$ each MS

WordPerfect 5.1 Quick Course
Eisch South-Western
This easy-to-use text-workbook covers all the necessary functions of WordPerfect 5.1 in a quick 12-15 hours of instruction. $$ MS

WordPerfect 5.0/5.1: Tutorial and Applications, IBM Version
Eisch South-Western
This practical text workbook makes students proficient users of the 5.0 and 5.1 versions of the WordPerfect word processing package. Taking a conversational approach, it presents information in a logical step-by-step manner. Completion time: 30 hrs. $ MS

WordPerfect for the Macintosh: Tutorial and Applications
Eisch
This text workbook makes students proficient users of WordPerfect for the Macintosh 2.0. Taking a conversational approach, it presents information in a logical step-by-step manner. Completion time: 30-35 hrs. $ MS, AP

WordPerfect Made Perfectly Easy, 2nd Edition

Sharon Anne Fisher-Larson Glencoe

Task oriented, eliminating extraneous theory and reading. Focuses on the tasks required by office personnel working with WordPerfect 5.1. Text comes with either a 5.25" or 3.5" disk. Clip art is included where the learner will perform those tasks that simulate the desktop publishing environment. $ MS

WordPerfect: Tutorial and Applications, Apple Version

Eisch South-Western

Students gain proficiency with the Apple version of the widely used word processing package. It is divided into two sections—basic and advanced. $$ AP

WordStar Release 5.0 and 5.5: Tutorials and Applications, IBM Version

Graham South-Western

This practical text workbook presents the software in an easy-to-follow, step-by-step manner. It leads students from simple to complex functions. Completion time: 30-35 hrs. $$ MS

Working Your Way Through WordStar Release 4, 2nd Edition

Graham South-Western

The word processing program is presented in a nontechnical, step-by-step style. Each lesson contains specific objectives, command instructions, recaps of commands, and both written and computer exercises. Completion time: 30-35 hrs. $$ MS

Simulations

All Star Sports—A Business Forms Simulation

Stout and Warren South-Western

While completing their duties in the advertising, purchasing, sales, and accounting departments at All Star Sports, students will learn to prepare various business forms such as purchase orders, invoices, and voucher checks. $

Contemporary Personnel: A Word Processing Simulation

Linda Mallinson Regents/Prentice Hall

This complete word processing simulation package sharpens students' word processing skills and places them in a variety of real-world jobs. It ties together their abilities to think.

Dallas Oil, Inc., An Administrative Secretary Simulation, 2nd Edition

Dickinson South-Western

Students will learn about corporate structure and will gain a better understanding of how big business operates. Students will be given specific tasks to complete and will be guided by the procedures manual, which includes a glossary of corporate and oil terms. Completion time: 20 hrs. $

Educational Resource Center—An Authentic Rough Draft Simulation

Briggaman South-Western

Students acquire realistic, meaningful keyboarding and office experience as they develop critical-thinking, decision-making, and problem-solving skills. $

Encore Talent Agency II: A Keyboarding Simulation

McIntosh and Welter South-Western

Designed for advanced keyboarding students. As typists for a booking agency for models and actors/actresses, students perform 25 challenging and comprehensive jobs dealing with letters, memos, announcements, teleconference schedules, and miscellaneous forms. $

Long Island Lions, Inc., Uniondale, New York: A WP Simulation

Patricia Buonaguro Regents/Prentice Hall

By accepting jobs as correspondence secretaries in the Document Processing Department of the Long Island Lions, Inc.—a fictitious major league baseball team, students learn to master important elements of style and 30 key word processing tasks. $

Paula's Plantscape—A Clerical Skills Simulation, 2nd Edition

Noll and Lovern South-Western

Designed to prepare students for general clerk positions, it provides interesting instruction in various office tasks. Students improve time management skills, become familiar with common business forms, increase their business vocabulary, and develop good telephone techniques. Completion time: 18-20 hrs. $

Pinetree Fashions, A Flow-of-Work Office Simulation

Boche, Craven, and Kroenke South-Western

It is a complete simulated work experience that takes place in a controlled environment—the classroom. Students can select from up to 21 different job positions for initial employment. $$$$$$

Relay—An Information Management Workflow

Boche and BeMent South-Western

Uses microcomputers to help students gain a real-world understanding of both the importance of each person's job in business and how all jobs interrelate. Students participate in an orientation and training program for their respective jobs. $$$$$$

Snow Country II: A Document Processing Practice Set

Reynolds South-Western

A practice set in which students work as entry-level typists. Students process letters, reports, memorandums, tables, purchase orders, and invoices. $

Sports Spectrum—A Flow-of-Work Simulation, 2nd Edition

Warren and Radcliff South-Western

Students work as employees for Sports Spectrum. They view a business operation from the perspectives of employees, management, suppliers, and customers. They can rotate through different positions within the organization. $$$$$$

Student Activities Assistant—A Keyboarding Simulation

Kushner South-Western

Provides junior high/middle school students with opportunities to apply their basic keyboarding skills. $

Suncoast Civic Center: An Office Assistant Simulation, 3rd Edition

Taylor, Sanchez, and Ransbottom South-Western

Helps students make the transition from completing textbook assignments to performing office duties. By following general instructions and sample documents, students learn to work on their own, prioritize tasks, and develop decision-making skill. Completion time: 20-25 hrs. $

T-Shirt Factory II, A Keyboarding Simulation

Clayton South-Western

Designed for use after the first semester of first-year keyboarding. This simulation allows students to progress at their own rate through 15 realistic activities designed to enhance their keyboarding skills. Students work through a variety of jobs. $

The Insurance Clerk—Aaron Insurance Agency

McDonnell and Lee South-Western

Students learn insurance terminology and become familiar with forms, work flow, and insurance concepts. Completion time: 30 hrs. $

The Legal Secretary—Fernandez, Payne & Webster, 3rd Edition

McIntosh and Welter South-Western

Reinforces previously learned secretarial skills in a realistic office environment. $

The Medical Secretary, Pediatric Associate—An Office Job Simulation, 2nd Edition

Humphrey South-Western

Represents four days of work as an entry-level medical secretary. The students develop their general office and keyboarding skills while performing a wide variety of tasks. $

The Receptionist: The New Orleans Times, 3rd Edition

Butler and Smith South-Western

Students prepare camera-ready material for an in-house newsletter. In addition, they take classified ads, wedding announcements, subscriptions, and complaints; maintain a monthly calendar; and participate in a newspaper promotion campaign. $

The Regal Crown Hotel: An Advanced Word Processing Simulation

Dill and Van Sickle South-Western

This realistic text-workbook provides practice and reinforcement for functions found in most commercial word processing packages. Completion time: 15 hrs. $

The Word Processing Specialist, Info-Tec—Office Job Simulation, 2nd Edition

Matthews and Moody South-Western

This self-contained package simulates the position of a word processing specialist in an office systems consulting firm for a period of four, six-hour days. Students are provided the opportunity to apply a variety of word processing procedures, terminology, and decision-making techniques. Completion time: 20-24 hrs. $

Triangle Broadcasting, Inc.: A Word/Information Processing Simulation

Johnson and Nagai Glencoe

$

Typewriting Office Practice—Tronics, Inc.

Atkinson and VanHuss South-Western

Simulate a typist's duties for Tronics, Inc., a manufacturer and marketer of electronic products. Students develop their basic office skills, especially typewriting, communication, and information handling. $

Vista Ridge Mall: A Keyboarding Simulation

Jones South-Western

Intermediate and second-year typewriting students are assigned true-to-life tasks in the office of a shopping mall. $

Wheels for Sale: A Computer Applications Simulation

Boyce and Boyce South-Western

Have fun completing 12 information-processing projects and learning about the uses of computers in real life. Updated to keep pace with the newest features in popular commercial software packages and presented in simple-to-complex order, the projects cover word processing, database, mail merge, spreadsheets, electronic mail/ telecommunications, graphing, integrated software, and desktop publishing. $$

William Wright, Candidate: A WordPerfect Simulation

Ambrose South-Western

Students use WordPerfect to prepare name/address files, letters, outlines, schedules, forms, news releases, telephone scripts, flyers, and tables. This simulation reinforces document processing and formatting skills, WordPerfect software functions, and basic skills such as composition, math, decision making, and use of reference sources. $$$

Other

Automated Office—Filmstrips and Cassettes

Fosbury South-Western

This series has been developed for use in any office education class. The set provides students with a visual impression of the various types of equipment used in the automated office. Vol. 1 and 2, each $$$$$$

Basic Skills in Word Processing: The Universal Approach

Universal Training Systems Co. South-Western

This will help students develop competencies in basic text entry, locate, format, and edit operations on any word processing system. Completion time: 25-30 hrs.

$$$$$$ filmstrips

Dallas Oil, Inc., An Administrative Secretary Simulation, 2nd Edition

Dickinson South-Western

Students will learn about corporate structure and will gain a better understanding of how big business operates. Students will be given specific tasks to complete and will be guided by the procedures manual, which includes a glossary of corporate and oil terms. Completion time: 20 hrs.

$ Audiocassette

Letterheads and Forms for Use in Typewriting, Transcriptions, and Office Procedures

South-Western

The letterheads and forms in this versatile package may be used in typewriting, word processing, or office procedures classes. $

Machine Transcription Word Processing for Word Processors, Microcomputers, and Typewriters

South-Western

This set is composed of ten cassettes containing 20 jobs and two cassettes for testing purposes. Each job consists of approximately 15 minutes of typical business dictation to be transcribed. $$$$$

Q&A QueCards

Que Development Group — Que

Convenient flip-card format provides information at a glance. Complete directions for Q&A's word processing, report creation, and printing capabilities. $

Skills for The Electronic World—Reach A Little Higher

South-Western

Features 15 diverse stories about well-known individuals who have achieved success. $$ Audiocassettes

The Legal Secretary—Fernandez, Payne & Webster 3rd Edition

McIntosh and Welter — South-Western

Reinforces previously learned secretarial skills in a realistic office environment. $$ Audiocassettes

The Proofreader Card

Jones — South-Western

This sturdy 6" x 4" card helps develop accurate proofreading skills as students use it to proceed line by line through copy. The back side of the card provides a list and examples of proofreader's marks. Another list shows hyphenation for special words. $

The Receptionist: The New Orleans Times, 3rd Edition

Butler and Smith — South-Western

Students prepare camera-ready material for an in-house newsletter. In addition, they take classified ads, wedding announcements, subscriptions, and complaints; maintain a monthly calendar; and participate in a newspaper promotion campaign. $$ Audiocassettes

The Secretary—Carrollwood Industries, Inc., 3rd Edition

McIntosh and Welter — South-Western

Employs students with *Carrollwood Industries*, a leading franchisor of health and fitness products. Completion time: 20-24 hrs. $$ Audiocassette

Transparencies for
- ***Display Write 4***
- ***Professional Write***
- ***WordPerfect 4.2***
- ***WordPerfect 5.0***
- ***WordPerfect 5.1***
- ***WordStar 6.0***

Dictation Disc Company

Transparencies illustrate what you are describing so your students can see what you are telling them to do. This saves valuable time. The transparencies enable each function to be taught more rapidly by pointing to illustrations. $$$$-$$$$$$

Transparencies for Increasing Your Productivity Series

Haiduk, Laby, Ross, and Shuman — Glencoe

Fifty transparencies illustrate key concepts of WordPerfect 5.1; Lotus 1-2-3, Release 2.2; dBase III Plus; and DOS, as presented in the Increasing Your Productivity Series. $$$$

Filing

Texts

Filing and Database Systems, 10th Edition

Stewart and Greene — Glencoe

This comprehensive program presents filing rules compatible with the latest ARMA standards. Throughout this edition, greater emphasis is given to database technology and terminology. The program is designed for use in filing, clerical, and secretarial procedures courses. $

Gregg Quick Filing Practice, 3rd Edition

Jeffrey R. Stewart, Jr. — Glencoe

The 12 new indexing rules are compatible with those of ARMA. Students learn to apply the rules for individual names (Rules 1-5), business names (Rules 6-10), and government names and addresses (Rules 11-12) in separate segments. Ideal for secretarial and office procedures courses. $

Records Management: Integrated Information Systems, 3rd Edition

Wallace and Lee — Regents/Prentice Hall

Focusing on the systems approach to managing information in any form (particularly paper, microform, and electronic records), this text presents practical guidelines for establishing a records management system. $

813

Text Workbooks

Filing Practice Workbook
Friedman and Grossman — Glencoe
Provides 32 jobs that cover alphabetic, geographic, numeric, ZIP code, and subject filing. At the top of each page, students are given filing rules illustrated with examples. From each page, students can then remove 19 perforated slips of paper, which become the practice cards "to be filed in order." $

Filing Workbook
Frosch, Dembo, and Rosen — Dictation Disc Company
Nobody likes to file. There is no way to make filing exciting unless you put each name on a $100 bill. So let's make it funny. Every time they file, your students are going to laugh and learn. $

Workbook Exercises in Alphabetic Filing, 4th Edition
Stewart and Scharle — Glencoe
Extensive practice in card filing is provided by this text-workbook. It presents the 12 new indexing rules which are compatible with those of ARMA and provides strong reinforcement for each rule. This program is ideal as a short unit in secretarial and office procedures courses. $

Videos

Introduction to Filing and Records Management: I Think It's In
Teaching Aids Inc.
Students need to know how to organize an office...how filing systems work...how to store files...how records management interfaces with word processing...and even ARMA. This is a practical video with down to earth information. $$$$

Software—MS-DOS, Macintosh, Apple

Filing and Database Systems
Stewart and Scharle — Glencoe
Program presents filing rules compatible with the latest ARMA standards. Throughout this edition, greater emphasis is given to database technology and terminology. Designed for use in filing, clerical, and secretarial procedures courses. $ MS, MAC, AP

Simulations

Filing Made Easy: A Filing Simulation, 3rd Edition
Ralph M. Holmes — Glencoe
In 15-20 hours students complete training, using the latest ARMA-compatible rules, in alphabetic, geographic, subject, and numeric filing methods. A unique teaching pattern and self-check reviews let students pace their own progress. $

Other

Records Management Audio Visual Kit
Cox & Moon — Delmar
Created to introduce the philosophy, procedures and language of records management to high school office education students, this teaching aid consists of 31 full-color slides, and compact cassette tape. $$$$

Reference Books

10,000 Legal Words: Spelled and Divided for Quick Reference
Kurtz, Adams, and Vezeau — Glencoe
$

20,000+ Words: Spelled and Divided for Quick Reference, 9th Edition
Zoubek and Hosler — Glencoe
An easy-to-use dictionary without definitions. It contains the correct spelling and word-division points for over 20,000 of the words most frequently used in business. $

Business Communication, 2nd Edition
Bonnie D. Phillips — Delmar
$

Business Communications: Speaking and Writing Effectively
Flora Reia — Regents/Prentice Hall
$

Communication Skills for the World of Work
Cheesebro, O'Connor, and Rios — Regents/Prentice Hall
$

Office Reference Guide
Dictation Disc Company
Provides punctuation answers in seconds—in simple language—illustrated. We tossed out the abstract language. The conjunctions, the participles and all their relatives, were tossed out. Also contains a 6,000 word speller. $

Paradigm Reference Manual
Branchaw and Bowman — Paradigm
Designed primarily for use as a supplementary text for all titles in keyboarding, shorthand, office procedures, word processing applications, machine transcription, business English, and business communications. $

Practical English Handbook, 9th Edition
Watkins and Dillingham — Houghton Mifflin
Concise yet thorough handbook of the best practices in writing American English. $

Prentice Hall Office Handbook, 3rd Edition
Rita C. Kutie — Regents/Prentice Hall
Provides information on grammar and spelling, punctuation, formats for business documents, and more. Includes a 20,000-word word finder, plus notes throughout that help readers using word processors make full use of software features. $

Random House Webster's College Dictionary
Glencoe
Presents a clear, efficient organization of all entries, including biographical and geographical terms, abbreviations, and foreign words. It presents the current, most frequently used meanings first. $

Reference Manual for Office Personnel
Branchaw and Bowman — Paradigm
Intended for those who process the written word—from students to secretaries—this manual presents the basic rules for abbreviations, alphabetic indexing, capitalization, grammar, numbers, plurals and possessives, punctuation, spelling, and word division. $

Spelling Basics
Christine Maxwell — EMC Publishing
Spelling Basics provides practical assistance to anyone needing to improve their spelling skills. Ideal for students preparing for business or office employment, this text workbook offers practice with applying standard spelling rules and exceptions. $

The Answer Book
Jean Dorrell — EMC Publishing
Designed for the student, the business writer, and the professional office worker, The Answer Book combines the features of a reference manual with the informative narrative of a textbook. $

The Gregg Reference Manual, 7th Edition
William A. Sabin — Glencoe
Text is a comprehensive reference for both basic and specific information in English grammar, style, and usage, as well as for techniques and procedures for document processing and filing. The book may be used as a core text or a supplement in office procedures courses. $

The Reference Guide: A Handbook for Office Personnel, 2nd Edition
Ralph M. Holmes — Glencoe
Easy-to-use business reference manual and teaching tool includes basic rules of grammar and mechanics, plus a glossary of information-processing terms. $

Texts

Administrative Procedures in the Electronic Office
Roseanne Bryce Sanders — Regents/Prentice Hall
Text provides current data on state-of-the-art technology and equipment and explores the procedures and skills needed to utilize those resources. It incorporates essential "how-to" procedures for improving dictation. $

Communicating in Business & Industry, 2nd Edition
Thomas W. Comstock — Delmar
A concise, how-to presentation of verbal and nonverbal communication skills. Listening, reading, telephone and computer skills, job applications, and body language are addressed. Up-to-date coverage includes: FAX and cellular communications, word processing and desktop publishing, time management, etc. $

815

Telephone Techniques
Dorothy A. Neal — Glencoe
Focuses on the critical personal skills required to use the telephone professionally and successfully in an office environment. Included are sections on listening skills, taking messages, handling problem callers and situations, and transferring calls. $

Text Workbooks

Business Communication for the Microcomputer
Shelton — South-Western
This text workbook/software package provides students with the essentials of good business writing and familiarizes them with microcomputer document formatting. $

Communication Skills for the Processing of Words, 3rd Edition
Reiff — South-Western
This edition gives students a firm grasp of essential skills while it helps develop the decision-making skills necessary for success in today's offices. Completion time: 9 weeks. $

Effective Presentation Skills: Better Speaking
MarkED
$

General Office Procedures
Wood and Sanders — Glencoe
$

Integrated Keyboarding/Communication Skills, 2nd Edition
Reiff — South-Western
This newly revised text workbook offers the same popular features found in the first edition. New features include proofreading and contextual drills and an optional set of tests. This provides the opportunity to integrate keyboarding/typewriting skills and sharpen grammar skills. $

Machine Transcription, Dictation, and Proofreading—An Introduction
Pasewark — South-Western
With this text workbook, students will develop proficiency in three essential skill areas—transcription, dictation, and proofreading. Completion time: 20 hrs. $

Machine Transcription Word Processing for Word Processors, Microcomputers, and Typewriters, 2nd Edition
Pasewark — South-Western
This revised text workbook with accompanying cassettes gives students a realistic view of working as a transcriptionist in 20 different business offices. This edition puts more emphasis on vocabulary building, proofreading skills, and standard placement guidelines. $

On-The-Job Communications for Business, The Professions, Government
Jacobi and Christensen — Regents/Prentice Hall
$

Skills for the Electronic World—Reach a Little Higher
Moody — South-Western
Students develop the communication skills needed for survival, promotion, and success in today's competitive, complex business office. The text is heavily activity-oriented so that students can learn by doing. $

Telephone Courtesy and Customer Service
MarkED
$

Videos

Communicate and Win
MarkED
Effective communication skills are an element of every successful business person's arsenal. Help your students improve writing and listening skills, speak with more confidence and authority, and more! $$$$

Telephone Skills—Why They're Important
Teaching Aids Inc.
Impresses new employees that the telephone is the front line of all businesses and that its importance should never be underestimated. Entertaining in format, this video will remind the student how a poorly trained customer service representative can quickly ruin the reputation of a good company. $$$$

Thank You for Calling! Effective Telephone Techniques
Teaching Aids, Inc.
Provides students with the basic skills needed to handle all types of business telephone communications. The first part of the program shows students how to deal with a host of incoming calls. The second segment presents the steps for placing calls. $$$$

Software—MS-DOS, Macintosh, Apple

Business Communication for the Microcomputer
Shelton — South-Western
This text-workbook/software package provides students with the essentials of good business writing and familiarizes them with microcomputer document formatting. $ MS

Communication Skills for the Processing of Words, 3rd Edition
Reiff — South-Western
This edition gives students a firm grasp of essential skills while it helps develop the decision-making skills necessary for success in today's offices. Completion time: 9 weeks. $ MS, AP

816

Phone Power

MarkED

Few students understand the power of the telephone. This video makes it clear: the telephone is a tool for managers that itself must be managed. Addresses such key ideas as: preventing telephone tag, scheduling call-backs, getting detailed messages, positive call screening, preparation, etc. $$$$

Phonework: On the Job

Teaching Aids Inc.

Use this video to teach the importance of proper phone use on the job including answering, dealing with customers, taking messages, and using various phone options. $$$$

Telephone Skills—Techniques for Customer Types

Teaching Aids Inc.

This video will demonstrate specifically to the beginner and remind the pro how to change telephone nightmares into public relations and sales opportunities. Various types of customers are presented with specific response strategies explored. $$$$

Other

Skills for the Electronic World—Reach a Little Higher

Moody South-Western

Students develop the communication skills needed for survival, promotion, and success in today's competitive, complex business office. The text is heavily activity-oriented so that students can learn by doing. $$ Audiocassette

Telephone Techniques

Dorothy A. Neal Glencoe

Focuses on the critical personal skills required to use the telephone professionally and successfully in an office environment. Included are sections on listening skills, taking messages, handling problem callers and situations, and transferring calls.
$

Database

Reference Books

1-2-3 Database Techniques

Andersen and Weil Que

Complete introduction to efficient 1-2-3 database design! Helps users create complex database applications. Features dozens of helpful application tips for professional results. $$

10 Minute Guide to Q&A

Sams Sams

Explains essential word processing and database operation in 15 to 20 quick exercises. Exploring merge functions and intelligent assistant operations, each exercise establishes a goal then offers a tutorial to complete that goal in 10 minutes or less. $

dBASE III Plus Handbook, 2nd Edition

George T. Chou Que

Easy-to-understand resource. Includes Command Reference. $

dBASE IV 1.1 QuickStart

Que Development Group Que

Popular QuickStart format takes the intimidation out of learning dBASE IV. Shows readers how to design and build a database with ease. $$

dBASE IV Programming Techniques

W. Edward Tiley Que

Features Command Summary and provides detailed information on the ReportWriter and the Applications Generator $$

dBASE IV Quick Reference

Que Development Group Que

The ready resource for commonly used dBASE commands. Features quick and easy-to-find answers and listings. $

dBASE IV Version 1.1 for the First Time User

Howard Dickler, Ph.D. Sams

Written for flat-file and relational database users who are ready to learn dBASE IV 1.1. This book advances step-by-step through the process of developing a complete database management system. The text covers the basics of dBASE IV. $

Everyman's Database Primer Featuring dBASE IV Version 1.1

Byers and Prague Sams

This book provides a thorough explanation of dBASE IV 1.1 software and database management concepts. Easy-to-understand text, program examples, and over 200 sample dBASE IV 1.1 screens combine to make this book the ideal introduction to dBASE. $

Lotus 1-2-3 Quick Reference Guide

Dennis P. Curtin Regents/Prentice Hall

A brief, inexpensive keystroke reference guide for beginning to use advanced software features. $

Q&A in Business

David B. Adams Sams

This complete book/disk set is packed with clear, concise instruction and ready-to-use business templates to make the Q&A database and word processing user more productive. $$

Quick Reference Guides
dBase III Plus
dBase IV

Dictation Disc Company

These software specific Quick Reference Guides are correlated to our book. Your students follow the illustrated instructions which virtually put their fingers on the correct keys. $ each

Software Solutions: Concepts and Applications
Burton and Shelton
Houghton Mifflin

A four-in-one course. Software Solutions gives students a concise introduction to basic microcomputer concepts, then provides intensive training on MS-DOS, WordPerfect 5.1, Lotus 1-2-3, Release 2.2, and dBASE III Plus. $$

The Best Book of FoxPro
Celeste Robinson
Sams

A comprehensive tutorial and reference for this powerful, user-friendly database management system. Designed for users of both FoxBase and FoxPro, the text covers everything users need to make databases run smoothly. Packed with tips and techniques that make learning FoxPro quick and effective. $

The Best Book of PFS: First Choice
Joseph Wikert
Sams

Provides in-depth coverage on all facets of the latest release of this powerful integrated software. Written for novice computer users and business users at all levels, it offers numerous illustrations, practical applications, and pragmatic tips. $

The Best Book of Professional Write and File
Wolf and Kraynak
Sams

Newcomers to word processing and database management will discover the many features of these two powerful programs. Through complete examples and practical applications, this book shows how easy these programs are to understand and use. $

The First Book of dBASE IV 1.1
Steven Currie
Sams

Quick Steps, Quick References, and helpful illustrations ensure beginning users of effective database results. This First Book introduces the features and functions of dBASE IV Version 1.1. $

The First Book of Paradox 3.5
Jonathan Kamin
Sams

Readers get the first word on Borland's latest update to its popular database management program. Written as an introductory tutorial for the nontechnical, business-oriented computer user, it focuses on the development of a client/inventory/transaction database. $

The First Book of Q&A
Sandra Schnyder
Sams

This book provides the novice computer user with a once-over lightly treatment of this popular database. Teaches the fundamentals of installing and using this software. $

Thomason Learning Series
Annette J. Thomason
Houghton Mifflin

Texts in series: New Learning Lotus 1-2-3, Release 2.2 with coverage of Release 2.3; Learning WordPerfect 4.2; Learning WordPerfect 5.0; Learning WordPerfect 5.1; Learning Lotus 1-2-3; and Learning dBase III Plus. $

Using DataEase
Walter Bruce
Que

Features Quick Start tutorials for fast database productivity and covers SQL, database forms, reports, and customized applications. $

Using dBASE IV
Que Development Group
Que

Broadest and best dBASE IV instruction available. Features Command Chart, Functions Reference, and SQL coverage with highlights tips, notes, and examples. $

Using ORACLE
Ted Crooks
Que

Features Quick Starts and a tear-out Command Card. Has in-depth coverage of ORACLE's embedded SQL for customized applications. $$

Using Paradox 3
Walter Bruce
Que

Now includes coverage of new Version 3.5. Covers multiuser capabilities and the Paradox Application Language. $

Using R:BASE
Marva Dasef
Que

Contains comprehensive instructions, efficiency tips, and techniques. $$

Texts

Applications for Microcomputer Software
Janet R. Wilson
Regents/Prentice Hall

With challenging projects and case studies—for beginning through advanced word processing, spreadsheet, or database users—this volume can be used with any software and enhances students' problem-solving abilities using the microcomputer. $

Computer Explorations for Business
Goldman and Whitney Furjanic
Glencoe

Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphics tool. A telecommunications tool is simulated. Sophisticated equipment is not needed. $$$$$

dBase III Plus Advanced
CIMC

Table of contents includes linking and updating multiple files, inputting and outputting to other programs, writing simple programs, system design and program development, and application generator. $

dBase III Plus Beginning Course
CIMC

Includes database concepts, using the dBASE III Plus assistant, creating a database, adding data to a database file, modifying data in a database file, report and mailing label preparation, memory variables, operations, and functions, sorting and indexing files, data entry forms. $

dBase III Plus Procedures Manual
Dennis P. Curtin Regents/Prentice Hall
$

dBase III Plus: A Short Course
Dennis P. Curtin Regents/Prentice Hall
$

dBase IV: A Short Course
Dennis P. Curtin Regents/Prentice Hall
$

Filing and Database Systems, 10th Edition
Stewart, Jr., and Greene Glencoe
This comprehensive program presents filing rules compatible with the latest ARMA standards. Throughout this edition, greater emphasis is given to database technology and terminology. The program is designed for use in filing, clerical, and secretarial procedures courses. $

Increasing Your Productivity with dBase III PLUS
James Shuman Glencoe
Programming and applications development. Dot Prompt. The Assist Program. These topics can be overwhelming to a novice computer user. That's why our comprehensive dBase III Plus tutorial takes your students through the process, step-by-step with hands-on experience and using the student data disk. $

Information Processing: Concepts and Applications
Dennis P. Curtin Regents/Prentice Hall
This brief overview introduces students to major core concepts they will encounter in virtually all software packages. Case studies in the Lab Manual on DOS. $

Introduction to dBase IV
J. Robert Buck Regents/Prentice Hall
$

Lotus 1-2-3 Advanced
CIMC
Table of contents includes advanced worksheet and range command skills, advanced copy and move command skills, advanced file and print command skills, table look-up and special functions, and keyboard macros. $

Lotus 1-2-3 Beginning Course
CIMC
Includes getting started with Lotus 1-2-3, moving around the worksheet, typing cell entries, using 1-2-3 commands, indicating cell ranges, building a simple worksheet, building a simple database, building a simple graph, writing formulas, 1-2-3 functions, formatting a worksheet, etc. $$

Lotus 1-2-3 for Beginners, 2nd Edition
Latif-Pembry and Royer, C.P.A. Regents/Prentice Hall
Text updates the material to include Lotus 1-2-3 Version 2.2 and provides business applications and illustrations in all chapters. $

Lotus 1-2-3 Procedures Manual
Dennis P. Curtin Regents/Prentice Hall
$

Microcomputer Business Applications and Projects
Busche and Esbensen Regents/Prentice Hall
Text enables readers to become comfortable with four application software areas: database management, word processing, spreadsheets, and business graphics and presents IBM computer-based activities. Contains extensive illustrations throughout. $

PC Power: Microcomputer Applications
Klemin and Harsha Glencoe
A text-software program that supports a broad-based course in microcomputer concepts and applications. It provides students with the most complete hands-on PC training. $

Records Management for an Information Age
Arn and Titlow Delmar
New technologies, computerized alternatives in records management, state-of-the-art automated office equipment, plus the latest terminology; all are included. Begins with discussion of the systems approach to records management. $$

Text Workbooks

101 Database Exercises, 2nd Edition
Jeffrey R. Stewart Glencoe
Provides realistic practice materials and tests for students who are learning to work with an electronic filing system. The 101 exercises may be used with any database software; however, a tutorial for users of dBASE III Plus and Lotus 1-2-3 is included at the back of the book. $

Application Using The Personal Computer
Groneman and Owen-Jaderstrom South-Western
Offers a wide variety of business applications for students who have some proficiency with applications software programs. $$

Computer Applications for Business
Iris Blanc Dictation Disc Company
Introduces students to five computer skills through sequential application materials. The learner proceeds from basic to intermediate level. Introductory course—one-two semesters, word processing, spreadsheets, integration, desktop presentation. $

Database
Iris Blanc Dictation Disc Company
Generic book that may be used with any software or computer. Text focuses on the most commonly used database functions. Provides realistic applications. $

Database Applications
Drum South-Western
Supplements any database software package you are currently using to reinforce database management concepts. $

819

Database Productivity: Exercises and Applications

Paradigm

This generic exercise book provides realistic practice using beginning to intermediate features of database programs. Students learn skills in editing, modifying, sorting, and searching database tables and in creating, building, editing, and printing database reports. $

dBASE IV: Concepts, Exercises, and Applications

Arntson South-Western

Aims to present database management skills in the simplest, most direct way possible. $

dBASE IV PC Tutor

Que Development Group Que

Unique on-screen training method from ATI. Perfect software/book tutorial. $$

dBASE III Plus: Concepts, Exercises, and Applications

Arntson South-Western

Provides a step-by-step walk through database management using dBASE III PLUS software. $

Filing and Database Systems

Stewart, Jr. and Judith A. Scharle Glencoe

Presents filing rules compatible with the latest ARMA standards. Throughout this edition, greater emphasis is given to database technology and terminology. Designed for use in filing, clerical and secretarial procedures courses. $

Lotus 1-2-3 Tutorial and Applications

Groneman South-Western

Students quickly become proficient users of Lotus 1-2-3, versions 1.0, 2.0, 2.1, and 2.2, the leading spreadsheet program. Focuses on spreadsheet, database, and graphing applications. $$

Microcomputers: A Practical Approach

Klemin and Harsha Glencoe

For use in one- or two-semester courses, Microcomputers provides generic applications for spreadsheet, database, graphing, word processing, integrated, and communications software. $

Microcomputer Activities for the Office

Olinzock and Santos South-Western

The software simulates a package of "bundled" activities that duplicate activities common in today's automated business offices: customer accounts, database management, electronic calculator/notepad, financial decision making, payroll processing, and processing of business forms. $$$

MicroFile II: A Database Filing Program

Fosegan and Horton South-Western

An easy to learn microcomputer database program designed to introduce students to computer information storage and retrieving information. $$

PC-File+ and PC-File: Quick Start, Versions 3.0 and 5.01

South-Western

Offers hands-on tutorial on the basic skills of PC-File+ and PC-File, Versions 3.0 and 5.01. Step-by-step directions are provided for creating, changing, manipulating, and reporting on the records in a database. $$

Quattro Pro: Concepts and Applications

Troop and Craig South-Western

Designed to train and develop students' skills in using Quattro Pro Versions 2.0 and 3.0 spreadsheet software, including its graphics and database applications. $$

Quick Guide to Database Management

Stewart, Jr., Melesco, and McMinnis Glencoe

With its coverage of database concepts combined with realistic applications, this practical text workbook meets the evolving needs of instructors and students in microcomputer applications, office procedures, records management, and filing programs. $

Seasons Travel and Tours: Office Activities for Integrated Software

Cheryl Luke Glencoe

Hands-on training builds students' ability to use the most popular commercial integrated software packages while performing realistic office tasks. Flexible 15- to 20-hour simulation makes a travel agency the motivating setting for activities using word processing, database, and spreadsheets. $

Using dBASE for Database Applications

Drum and Jansen South-Western

Provides step-by-step instructions for using both dBASE III and dBASE IV. $

Using PFS: First Choice Tutorial and Applications

Drum and Jansen South-Western

Guides students through PFS: First Choice, the integrated software program that operates as word processor, file manager, spell checker/thesaurus, spreadsheet, graphics generator, and electronic communication to other computers. $$

Software— MS-DOS, Macintosh, Apple

Application Using The Personal Computer

Groneman and Owen-Jaderstrom South-Western

Offers a wide variety of business applications for students who have some proficiency with applications software programs. $$ MS, AP

Computer Explorations for Business

Goldman, and Furjanic Glencoe

Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphics tool. A telecommunications tool is simulated. Sophisticated equipment is not needed. $$$$$ MS, AP

Database Tests on Diskettes

dBase III & IV
PFS File
Fox Base
Q & A
RBase

Dictation Disc Company

Evaluation tests problems on disks. Each test covers two to three functions to pinpoint deficiencies and key in on those functions that require remedial work. The tests are sequential and cumulative, they tell you the competency level of each student. Each test is given a point scale and time frame. Tests may be used with any book. $$ each MS

820

Filing and Database Systems, 10th Edition

Stewart and Greene Glencoe

This comprehensive program presents filing rules compatible with the latest ARMA standards. Throughout this edition, greater emphasis is given to database technology and terminology. The program is designed for use in filing, clerical, and secretarial procedures courses. $ MS, AP

Increasing Your Productivity with dBase III PLUS

James Shuman Glencoe

Programming and applications development. Dot Prompt. The Assist Program. These topics can be overwhelming to a novice computer user. That's why our comprehensive dBase III Plus tutorial takes your students through the process, step-by-step with hands on experience and using the student data disk. $ MS

Lotus 1-2-3 Tutorial and Applications

Groneman South-Western

Students quickly become proficient users of Lotus 1-2-3, versions 1.0, 2.0, 2.1, and 2.2, the leading spreadsheet program. Focuses on spreadsheet, database, and graphing applications. $$ MS

McGraw-Hill Database

Gregg/McGraw-Hill Glencoe

Teach database management applications or perform simple administrative tasks. Offers a sort function to reorder the database in ascending or descending order on a field chosen by the user, and a get function which searches the database and pulls out records that match a pattern specified by user. $ MS, AP

Microcomputers: A Practical Approach

Klemin and Harsha Glencoe

For use in one- or two-semester courses, Microcomputers provides generic applications for spreadsheet, database, graphing, word processing, integrated, and communications software. $ MS, AP

Microcomputer Activities for the Office

Olinzock and Santos South-Western

The software simulates a package of "bundled" activities that duplicate activities common in today's automated business offices: customer accounts, database management, electronic calculator/notepad, financial decision making, payroll processing, and processing of business forms. $$$ MS, AP

Microcomputer Business Applications and Projects

Busche and Esbensen Regents/Prentice Hall

Text enables readers to become comfortable with four application software areas: database management, word processing, spreadsheets, and business graphics and presents IBM computer-based activities; contains extensive illustrations throughout. $ MS

MicroFile II: A Database Filing Program

Fosegan and Horton South-Western

An easy to learn microcomputer database program designed to introduce students to computer information storage and retrieving information. $$ MS, AP

PC Power: Microcomputer Applications

Klemin and Harsha Glencoe

A text-software program that supports a broad-based course in microcomputer concepts and applications. It provides students with the most complete hands-on PC training. $ MS, MAC

Power Training From ATI

Teaching Aids Inc.

Teach yourself to use dBASE III Plus, dBase IV, Display Write 4, DOS 3.3, DOS 4.0, Lotus 1-2-3 (2.2), MicroSoft Word (5.0), MultiMate Adv. II, OS/2, PC Tools, PageMaker, SuperCalc 5, Windows 3, WordPerfect (5.0), WordPerfect (5.0) Adv., WordPerfect (5.1), PC/AT, PC/XT, and PS/2. $$$ MS

Seasons Travel and Tours: Office Activities for Integrated Soft

Cheryl Luke Glencoe

Hands-on training builds students' ability to use the most popular commercial integrated software packages while performing realistic office tasks. Flexible 15- to 20-hour simulation makes a travel agency the motivating setting for activities using word processing, database, and spreadsheets. $ MS

Using PFS: First Choice Tutorial and Applications

Drum and Jansen South-Western

Guides students through PFS: First Choice, the integrated software program that operates as word processor, file manager, spell checker/thesaurus, spreadsheet, graphics generator, and electronic communication to other computers. $$ MS

Simulations

Sails for Rent: An Information Management Simulation

Boyce and Boyce South-Western

Go beyond merely processing information to managing information. Making decisions, creating documents, originating databases and spreadsheets, and designing forms are some of the skills students will acquire as employees training in a multi-divisional recreation company based in the Hawaiian Islands. $$

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T.H.E. Total Health Experience: A Microcomputer Applications Practice Set

Holmes, Eide, and Klemin Glencoe

Set in a health and fitness club—integrates the teaching of four types of microcomputer applications: word processing, spreadsheet, database, and graphics. Students practice selecting appropriate software, prioritizing tasks, and doing disk and file maintenance. $$$$

Wall Street Office Systems: A Microcomputer Simulation

Olinzock, Santos, and Sharp South-Western

This is the first office procedures simulation to cover all major electronic office systems: word processing; databases; spreadsheets; daily planner/calendar; a public database similar to CompuServe; electronic mail; and disk utilities. $$$

Wheels for Sale: A Computer Applications Simulation

Boyce and Boyce South-Western

Have fun completing 12 information-processing projects and learning about the uses of computers in real life. Updated to keep pace with the newest features in popular commercial software packages and presented in a simple-to-complex order, the projects cover word processing, database, mail merge, spreadsheets, electronic mail/telecommunications, graphing, integrated software, and desktop publishing. $$

Worldwide Publishing, Inc.: An Information Processing and Computer Simulation

Fruehling and Weaver EMC Publishing

Set in an electronic office, this simulation gives students an opportunity to work for different departments using microcomputer applications. Students work with database, spreadsheet, graphics, word processing, and integrated software applications to practice solving business problems. $

Spreadsheet

Reference Books

1-2-3 Graphics Techniques

Steve Sagman Que

The most effective methods for spreadsheet graphics and analysis! Features tips and techniques for high-quality graphs and other presentation material and packed with examples and illustrations. $

1-2-3 Macro Library, 3rd Edition

Que Development Group Que

Innovative book/disk set for power users! Covers simple keystroke macros and complex programs for fast spreadsheet productivity. Features tips on developing macro programs for database and financial applications. $$

1-2-3 Release 2.2 PC Tutor

Que Development Group Que

The quick-learning guide to 1-2-3 spreadsheets! Complete with tutorial disk, book lessons, and hands-on exercises. Shows reader how to create worksheets, graphs, databases, and print reports. $$

1-2-3 Release 2.2 QueCards

Que Development Group Que

Perfect for those who use 1-2-3 applications daily! Has 60 quick reference cards to essential 1-2-3 commands and a spiral bound format with a built-in easel. $

1-2-3 Release 2.2 Quick Reference

Que Development Group Que

Easy-to-use format includes alphabetical task and command listings. Procedures and effective user tips are provided for each listing. $

1-2-3 Release 3.1 Quick Reference

Que Development Group Que

Compact pocket reference to vital 1-2-3 commands. Alphabetical listings make information easy to find. $

1-2-3 Release 3.1 QuickStart, 2nd Edition

Que Development Group Que

Illustrated, step-by-step guide to Release 3.1 worksheets! Unique visual approach provides instant productivity. Quick advice on great spreadsheet, database, and graphic applications. $

10 Minute Guide to Excel for Windows

Michael L. Miller Sams

This quick guide to spreadsheets ensures fast learning! Packed with 25 short lessons, this handy resource teaches the basics of Excel without wasting time. Each lesson focuses on an essential Excel for Windows function and gets the user productive in 10 minutes or less. $

10 Minute Guide to Lotus 1-2-3 for Windows

Sams

Here's the 1-2-3 resource for fast learning! 20 short lessons make learning worthwhile, and save valuable time. These goal-oriented tutorials move users through the creating, editing, and printing of spreadsheets and graphs. $

10 Minute Guide to Quattro Pro

Gloria Wheeler Sams

New spreadsheet users now have a quick, efficient guide to productivity with this 10 Minute Guide. Quattro Pro essentials are covered, including entering and editing data, writing formulas, and creating graphs and charts. A series of 25 short lessons explains each function and procedure. $

Lotus 1-2-3 Bible

Simpson and Burns Sams

A comprehensive collection of power tips and techniques for this standard-setting spreadsheet package. Covering Releases 2.3 and 3.1, the book presents an overview of basic procedures—complemented by lots of practical examples, illustrations, and icons highlighted to the latest enhancements. $$

Lotus 1-2-3 In Business
Michael Griffin Sams
A valuable time-saving worksheet resource. concise, "at-a-glance" instructions at the beginning of each chapter offer quick help to the new user. $$

Lotus 1-2-3: Step-by-Step, Version 2.2
Judd Robbins Sams
This comprehensive guide covers all features, including formulas, functions, macros, templates, and large worksheets. Useful for classroom text or self-training, the book offers margin notes and end-of-chapter reviews for quick and easy database management. $

Quattro Pro Quick Reference
Que Development Group Que
Easy-to-use format includes alphabetical task and command listings. Procedures and effective user tips are provided for each listing. $

Quattro Pro 3 QuickStart
Que Development Group Que
Que's easy-learning, visual approach to Quattro Pro spreadsheets! The best combination of step-by-step instruction, examples, and graphics. Covers everything from home budgeting to economic forecasting. $

Quick Reference Guides
Lotus 1-2-3 Intro.
Lotus 1-2-3 Ver. 2.2
Quattro Pro
Dictation Disc Company
These software specific Quick Reference Guides are correlated to your book. Your students follow the illustrated instructions which virtually put their fingers on the correct keys. $

Software Solutions: Concepts and Applications
Burton and Shelton Houghton Mifflin
A four-in-one course. Software Solutions gives students a concise introduction to basic microcomputer concepts, then provides intensive training on MS-DOS, WordPerfect 5.1, Lotus 1-2-3, Release 2.2, and dBASE III Plus. $$

The Best Book of Lotus 1-2-3: New Edition
Alan Simpson Sams
This comprehensive tutorial and reference guides beginning and experienced 1-2-3 users through all the features of the program. Hands-on exercises, sample worksheets, and numerous screen illustrations bolster an excellent learning tool. $$

The First Book of Excel 3 for the Mac
Christopher Van Buren Sams
This essential introduction is a solid formula for spreadsheet success. Step-by-step lessons to critical functions explore ways to formulate spreadsheets and create professional reports. Users also learn to apply practical business tips and techniques. $

The First Book of Excel 3 for Windows
Christopher Van Buren Sams
Quick, easy guide to creating powerful spreadsheets gets users started fast. Practical business-oriented examples provide tips and helpful hints so that readers can achieve professional results. A convenient Quick Reference to Excel commands plus numerous illustrations and step-by-step instructions. $

The First Book of Lotus 1-2-3/G
Peter Aitken Sams
An ideal beginner's guide to 1-2-3/G! This book gives users an introductory look at the new graphic version of 1-2-3 and the Presentation Manager user interface. Leads users easily from installation to personal productivity. $

The First Book of Lotus 1-2-3: New Edition
Simpson and Lichtman Sams
Beginners get a unique approach to learning the latest version of 1-2-3 with this book. Step-by-step instruction guides users through 1-2-3 worksheet and database capabilities. Focusing on quick and easy business application, this book shows users how to master all the new features. $

The First Book of Quattro Pro 3
Patrick Burns Sams
Completely updated to cover the latest release, this book takes readers step-by-step through Quattro Pro's fundamentals and procedures. Users learn how to design and build effective spreadsheets and add in dynamic graphic features without fuss. $

The First Book of the Mac
Rose and Rose Sams
Here's the first word on the Macintosh, complete with all essential Mac information! Performance tips and techniques make sure Mac beginners get started quickly—and coverage of desktop publishing, spreadsheet, word processing, and HyperCard capabilities make them productive. $

Thomason Learning Series
Annette J. Thomason Houghton Mifflin
Texts in series: New Learning Lotus 1-2-3, Release 2.2 with coverage of Release 2.3; Learning WordPerfect 4.2; Learning WordPerfect 5.0; Learning WordPerfect 5.1; Learning Lotus 1-2-3; and Learning dBase III Plus. $

Using 1-2-3 Release 2.2, Special Edition
Que Development Group Que
The all-time best-selling personal computer book—from the 1-2-3 experts at Que! Easy to follow format features numerous illustrations and examples. Includes Allways coverage, a troubleshooting section, and a complete command reference. $$

Texts

Applications for Microcomputer Software
Janet R. Wilson Regents/Prentice Hall
With challenging projects and case studies—for beginning through advanced word processing, spreadsheet, or database users—this volume can be used with any software and enhances students' problem-solving abilities using the microcomputer. $

Computer Explorations for Business
Goldman and Furjanic Glencoe
Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphics tool. A telecommunications tool is simulated, sophisticated equipment is not needed. $$$$$

Increasing Your Productivity with Lotus 1-2-3 Release 2.2
Paul Ross Glencoe
With this comprehensive tutorial program, your students learn Lotus 1-2-3, the leading spreadsheet package, by actually working through it, step-by-step. Through the use of the Student Data Disk, students master steps in a logical progression. $

Microcomputer Business Applications and Projects
Busche and Esbensen Regents/Prentice Hall
Text enables readers to become comfortable with four application software areas: database management, word processing, spreadsheets, business graphics and presents IBM computer-based activities. Contains extensive illustrations throughout. $

PC Power: Microcomputer Applications
Klemin and Harsha Glencoe
A text-software program that supports a broad-based course in microcomputer concepts and applications. It provides students with the most complete hands-on PC training. $

Using 1-2-3 Release 3.1, 2nd Edition
Que Development Group Que
The comprehensive resource for Release 3.1 from Que's world-recognized team of 1-2-3 experts! Features easy-to-read text and tutorials introducing worksheet basics, detailed coverage of advanced features—including multiple worksheet and file applications. $$

Using Quattro Pro
Patrick Burns Que
The complete, easy-to-use introduction to Quattro Pro! Includes Quick Start tutorials plus lasting reference material. Includes macro commands, review sections, tips, and a command chart. $

Text Workbooks

101 Advanced Spreadsheet Exercises: Using Lotus 1-2-3, VP Planner
Lloyd D. Brooks Glencoe
Consists of 101 short applications that are organized in conceptually related clusters. It contains enough conceptual material to aid students' understanding but focuses mainly on the steps required to learn advanced spreadsheet functions. $

101 Spreadsheet Exercises, 2nd Edition
Lloyd D. Brooks Glencoe
These exercises provide practice in any course where spreadsheets are used. As a 15-30 hour program of brief exercises, this program teaches most of the important spreadsheet functions, including keyboarding, editing, file management, formatting, replication, and formula creation. $

Computer Applications for Business
Iris Blanc Dictation Disc Company
Introduces students to five computer skills through sequential application materials. The learner proceeds from basic to intermediate level. Introductory course—one-two semesters, word processing, spreadsheets, integration, desktop presentation. $

Electronic Spreadsheet Applications In Practice
Close South-Western
Provides generic spreadsheet application exercises for students who know how to use spreadsheet software. $

Lotus 1-2-3 Tutorial and Applications
Groneman South-Western
Students quickly become proficient users of Lotus 1-2-3, versions 1.0, 2.0, 2.1, and 2.2, the leading spreadsheet program. Focuses on spreadsheet, database, and graphing applications. $

Microcomputer Activities for the Office
Olinzock and Santos South-Western
The software simulates a package of "bundled" activities that duplicate activities common in today's automated business offices: customer accounts, database management, electronic calculator/notepad, financial decision making, payroll processing, and processing of business forms. $$$

Microcomputers: A Practical Approach
Klemin and Harsha Glencoe
For use in one- or two-semester courses, Microcomputers provides generic applications for spreadsheet, database, graphing, word processing, integrated, and communications software. $

Quattro Pro: Concepts and Applications
Troop and Craig South-Western
Designed to train and develop students' skills in using Quattro Pro Versions 2.0 and 3.0 spreadsheet software, including its graphics and database applications. $

Spreadsheet Productivity: Exercises and Applications
Joseph C. Otto Paradigm
This generic exercise book provides realistic practice using beginning to intermediate features of spreadsheet programs. Students learn how to manipulate basic business spreadsheets and solve business problems. The entire workbook provides 30-45 hours of practice. $

Spreadsheets—Skill Building Exercises and Applications
Blanc and Vento Dictation Disc Company
The book contains 100 exercises in twelve lessons. The instructions are clearly presented to show students how input should appear on their screen. The exercises are sequential and cumulative. $

Using PFS: First Choice Tutorial and Applications

Drum and Jansen — South-Western

Guides students through PFS: First Choice, the integrated software program that operates as word processor, file manager, spell checker/thesaurus, spreadsheet, graphics generator, and electronic communication to other computers. $$

Videos

Lotus 1-2-3

Teaching Aids Inc.

Shows you how to set up a spreadsheet, enter text and value information, use formulas and ranges, edit and format cell entries, erase cells and save spreadsheet, and work through step-by-step examples. $

Lotus 1-2-3 "Graphs"

Teaching Aids Inc.

Shows you how to use the graph feature of Lotus 1-2-3. You will define data ranges, create pie charts, bar charts, and stacked bar charts. The power of graphs explained with easy step by step examples. $

Software—MS-DOS, Macintosh, Apple

Applications for Your Computer and You

Groneman and Jaderstrom — South-Western

Designed for microcomputer applications or computer literacy courses in grades 7-10, this text workbook can be used with virtually any brand of computer. Students can practice the skills they have already learned from computer software tutorials or instruction manuals. $$ MS, MAC, AP

Application Using the Personal Computer

Groneman and Owen-Jaderstrom — South-Western

Offers a wide variety of business applications for students who have some proficiency with applications software programs. $$ MS, MAC, AP

Computer Applications and Concepts

Groneman and Jaderstrom — South-Western

Gives students hands-on practice completing computer applications involving business, school, and personal situations. $$ MS, MAC, AP

Computer Explorations for Business

Goldman and Furjanic — Glencoe

Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphics tool. A telecommunications tool is simulated, sophisticated equipment is not needed. $$$$$ AP

Lotus 1-2-3 Tutorial and Applications

Groneman — South-Western

Students quickly become proficient users of Lotus 1-2-3, versions 1.0, 2.0, 2.1, and 2.2, the leading spreadsheet program. Focuses on spreadsheet, database, and graphing applications. $$ MS

McGraw-Hill Spreadsheet

Gregg/McGraw-Hill — Glencoe

Teach spreadsheet applications and complete typical business application problems found in textbooks. The spreadsheet, which supports a maximum of 26 columns by 250 rows, depending on cell sizes, is sufficient for almost any educational application. $$$$$$ MS, AP

Microcomputers: A Practical Approach

Klemin and Harsha — Glencoe

For use in one- or two-semester courses, Microcomputers provides generic applications for spreadsheet, database, graphing, word processing, integrated, and communications software. $ MS, MAC, AP

PC Power: Microcomputer Applications

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A text-software program that supports a broad-based course in microcomputer concepts and applications. It provides students with the most complete hands-on PC training. $ MS, MAC, AP

Quattro Pro: Concepts and Applications

Troop and Craig — South-Western

Designed to train and develop students' skills in using Quattro Pro Versions 2.0 and 3.0 spreadsheet software, including its graphics and database applications. $$ MS

Spreadsheets Tests on Diskettes

Lotus 1-2-3
SuperCalc3, Version 1.0 or 2.0
Excel
Excel for Mac

Blanc and Vento — Dictation Disc Compnay

Evaluation tests problems on disks. Each test covers two to three functions to pinpoint deficiencies and key in on those functions that require remedial work. The tests are sequential and cumulative, they tell you the competency level of each student. Each test is given a point scale and time frame. Tests may be used with any book. $$ each MS, MAC

Using PFS: First Choice Tutorial and Applications

Drum and Jansen — South-Western

Guides students through PFS: First Choice, the integrated software program that operates as word processor, file manager, spell checker/thesaurus, spreadsheet, graphics generator, and electronic communication to other computers. $$ MS

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An Information Management Simulation

Boyce and Boyce — South-Western

Go beyond merely processing information to managing information. Making decisions, creating documents, originating databases and spreadsheets, and designing forms are some of the skills students will acquire as employees training in a multi-divisional recreation company based in the Hawaiian Islands. $$

Seasons Travel and Tours: Office Activities for Integrated Software
Cheryl Luke Glencoe
Hands-on training builds students' ability to use the most popular commercial integrated software packages while performing realistic office tasks. Flexible 15- to 20-hour simulation makes a travel agency the motivating setting for activities using word processing, database, and spreadsheets. $

T.H.E. Total Health Experience: A Microcomputer Applications Practice Set
Holmes, Eide, and Klemin Glencoe
Set in a health and fitness club—integrates the teaching of four types of microcomputer applications: word processing, spreadsheet, database, and graphics. Students practice selecting appropriate software, prioritizing tasks, and doing disk and file maintenance. $$$$

Wall Street Office Systems: A Microcomputer Simulation
Olinzock, Santos, and Sharp South-Western
This is the first office procedures simulation to cover all major electronic office systems: word processing, databases, spreadsheets, daily planner/calendar, a public database similar to CompuServe, electronic mail, disk utilities. $$$

Wheels for Sale: A Computer Applications Simulation
Boyce and Boyce South-Western
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Worldwide Publishing, Inc.: An Information Processing and Computer Simulation
Fruehling and Weaver EMC Publishing
Set in an electronic office, this simulation gives students an opportunity to work for different departments using microcomputer applications. Students work with database, spreadsheet, graphics, word processing, and integrated software applications to practice solving business problems. $

Other

Transparencies for Lotus 1-2-3 (Intro.)
Dictation Disc Company
Transparencies illustrate what you are describing so that your students can see what you are telling them to do. This saves valuable time. The transparencies enable each function to be taught more rapidly by pointing to illustrations. $$$

Transparencies for Lotus 1-2-3, Version 2.2
Dictation Disc Company
Transparencies illustrate what you are describing so that your students can see what you are telling them to do. This saves valuable time. The transparencies enable each function to be taught more rapidly by pointing to illustrations. $$$$$$

Transparencies for SuperCalc3
Dictation Disc Company
Transparencies illustrate what you are describing so that your students can see what you are telling them to do. This saves valuable time. The transparencies enable each function to be taught more rapidly by pointing to illustrations. $$$$

Transparencies for dBase III Plus
Dictation Disc Company
Transparencies illustrate what you are describing so that your students can see what you are telling them to do. This saves valuable time. The transparencies enable each function to be taught more rapidly by pointing to illustrations. $$$$$

Transparencies for Increasing Your Productivity Series
Haiduk, Laby, Ross and Shuman Glencoe
Fifty transparencies illustrate key concepts of WordPerfect 5.1; Lotus 1-2-3, Release 2.2; dBase III Plus; and DOS, as presented in the Increasing Your Productivity Series. $$$$

Desktop Publishing

Reference Books

Reference Manual For Desktop Publishing Using Wordperfect 5.1
Gehris and Setcavage Dictation Disc Company
$

The First Book of PFS: First Publisher
Brown and Bixby Sams
Readers learn how to design and create letters, forms, and professional-quality publications. Through screen illustrations, command summaries, and the Quick Steps tutorial, users learn page elements, text styles, graphics, page layout, and production techniques. $

The First Book of the Mac
Rose and Rose Sams
Here's the first word on the Macintosh, complete with all essential Mac information! Performance tips and techniques make sure Mac beginners get started quickly—and coverage of desktop publishing, spreadsheet, word processing, and HyperCard capabilities make them productive. $

Using PageMaker 4 for Windows
Diane Burns and Sharyn Venit Que
Dozens of design tools, publication models, and efficiency tips. Includes quick start tutorials and a command reference. $$

826

Using PageMaker: Macintosh Version, 2nd Edition
C. J. Weigand — Que
Includes sample templates for newsletters, brochures, catalogs, and reports. Packed with production techniques, design basics, and business examples. $

Using PFS: First Publisher, 2nd Edition
Katherine Murray — Que
Updated coverage on word processing basics and layout. Power-packed with program and design tips and Quick Start lessons. $

Using Publish It!
Katherine Murray — Que
Combines practical tutorial and reference material. $

Using Word for Windows
Person and Rose — Que
Features Quick Start lessons, a tear-out Menu Map, and a troubleshooting section. Complete coverage of program basics—and advanced desktop publishing hints and combines easy-to-understand format with practical examples and in-depth coverage. $

WordPerfect 5.1 Quick Reference Guide
Dennis P. Curtin — Regents/Prentice Hall
Text demonstrates keystrokes for beginning through advanced program features—an ideal computer-side reference. It is logically organized by applications, not by commands, and presents a succinct and inexpensive guide for all users. $

WordPerfect Bible
Susan Baake-Kelly — Sams
This massive collection of WordPerfect power-user tips provides total coverage of all WordPerfect functions. With in-depth emphasis on advanced topics, this book helps users speed up their merge operations, graphics integration, and desktop publishing tasks. $$

WordPerfect Power Pack
Ralph Blodgett — Que
Ready-to-run macros and style sheets highlight this great book/disk set. Features timesaving applications for frequently used business tasks and result-oriented tutorials for reports, mail-merge, labels, legal documents, and desktop publishing. $$

Texts

100+ Desktop Publishing Exercises
Helen Youth — Regents/Prentice Hall
A practical, generic applications manual—ideal for use with any desktop publishing software—this volume offers over 100 exercises, complete with brief explanations of basic desktop publishing concepts and ample hands-on activities. $

Basics of Desktop Publishing
Instructional Materials
Introduction to basic desktop publishing, for use with secondary and postsecondary students. Covers terms, hardware and software, type selection, merging graphics, document design, layout, and proofreading. $

Communicating in Business and Industry, 2nd Edition
Thomas W. Comstock — Delmar
A concise, how-to presentation of verbal and nonverbal communication skills. Listening, reading, telephone and computer skills, job applications, and body language are addressed. Up-to-date coverage includes: FAX and cellular communications, word processing and desktop publishing, time management, etc. $

Concepts and Applications for the Desktop Publisher: A Brief Course
Arntson and Nordquist — South-Western
Includes basic concepts of desktop publishing as well as generic applications.

Desktop Publishing Using Pagemaker on the IBM-PC Version 4.0
Don Busche — Regents/Prentice Hall
Text covers the desktop publishing essentials of design, typography, graphics, and text. It contains step-by-step sample activities in each chapter plus a variety of hands-on drill and practice activities. $

Desktop Publishing Using PageMaker on the Macintosh
Don Busche — Regents/Prentice Hall
Text covers the desktop publishing essentials of design, typography, graphics, and text. It contains step-by-step sample activities in each chapter plus a variety of hands-on drill and practice activities. $

Desktop Publishing Using PFS: First Publisher, Version 3.0
Marilyn Thomas — Regents/Prentice Hall
Text follows each discussion of a topic with step-by-step keystroke instructions. It provides screen shots that allow readers to compare what is on their own monitors with what should be on their monitors. $

Desktop Publishing with WordPerfect 5.1
Dennis P. Curtin — Regents/Prentice Hall
Assuming background in basic word processing procedures (such as entering, editing, and printing), this desktop manual guides students through WordPerfect. $

Desktop Publishing: Producing Professional Publications
Benedict Kruse — Delmar
Using a generic approach, this text discusses the publishing process, manuscript preparation, computer-generated graphics, and setting up a production facility. The latest desktop publishing products are discussed, with pros/cons and the types of situations where they are most appropriate. $$

Hands-On Word For The IBM PC: A Self-Teaching Guide and Reference
Wallia and Hart — Regents/Prentice Hall
From the Prentice Hall "Hands-On Desktop Publishing Series". Text offers a unique, projects-oriented introduction to desktop publishing, presents easy-to-follow keystroke instructions for completing 18 of the most common desktop publishing tasks, integrates over 200 screen illustrations, uses large type, and comes in a convenient plastic comb binding. $

827

Keyboarding/Information Processing—Supplementary Application
Belis and Dembo South-Western
Designed to provide instructors with additional supplementary applications for use in keyboarding, word/information processing, desktop publishing, and computer applications courses. $$

Learning Desktop Publishing with Pagemaker, Versions 4.0/3.X
Louis Gioia Regents/Prentice Hall
Text assumes no prior computing experience; covers desktop publishing concepts thoroughly and concisely. It presents tutorial sections containing hands-on activities, highlighted in bold type and shows students how to function in the Microsoft Windows environment. $

Que's Using Ventura Publisher
Schuyler W. Lininger, Jr. Que
Quick Start tutorials show readers how to create business cards, newsletters, and longer, more complicated documents. Coverage for all DOS and Windows versions. $$

WordPerfect 5.0: A Complete Course
Dennis P. Curtin Regents/Prentice Hall
Includes information on the basics, editing and formatting, merge-printing and document assembly, desktop publishing, and special features. $

Text Workbooks

Advanced WordPerfect 5.0-5.1: Tutorial and Applications, Including Desktop Publishing
Sullivan South-Western
Now students who know WordPerfect basics can learn how to use the advanced features of the world's number one word processing program. This tutorial presents the advanced commands in WordPerfect 5.0 and 5.1 in an easy-to-follow, step-by-step fashion and gives students time-saving tips and techniques. They will also learn how to avoid common problems. $

Computer Applications for Business
Iris Blanc Dictation Disc Company
Introduces students to five computer skills through sequential application materials. The learner proceeds from basic to intermediate level. Introductory course—one-two semesters, word processing, spreadsheets, integration, desktop presentation. $

Desktop Publishing Applications: Macintosh/PageMaker
Holly Yasui Paradigm
Hands-on guide to desktop publishing on the Macintosh provides step-by-step instructions for creating business documents on a personal computer. With the use of PageMaker desktop publishing software, learn to prepare individual projects and templates with style sheets for on-going projects.$

Desktop Publishing in the Bag
Barefield South-Western
This versatile collection of independent exercises provides students with challenging activities and games while they learn to use DTP software. $

Desktop Publishing Basics
Margaret Brown Dictation Disc Company
Book contains clear and concise explanations of desktop publishing features. Allows the user to develop the skills and confidence needed to create desktop publications. $

Desktop Publishing Productivity: Exercises and Applications
Paradigm
This generic exercise book provides realistic practice in beginning to intermediate desktop publishing. Students learn skills in designing and assembling desktop publishing projects. They also have the opportunity to use graphics in their projects. $

Desktop Publishing: IBM PC PageMaker and Ventura Publisher
Yasui and Canfield Paradigm
A hands-on guide to creating business documents on IBM and compatible personal computers. The student works through step-by-step instructions to complete exercises for major projects such as: a report, a brochure, and a newsletter. $

Desktop Publishing Using PageMaker —for Use with IBM, IBM-Compatible, and Macintosh Computers
Brownell South-Western
Includes in-depth applications using PageMaker software (covers Versions up to and including Version 4.0). Progress from relatively easy applications of page design, such as producing a flyer, to more difficult applications, such as developing a brochure, a newsletter, or a newspaper tabloid. $$

Desktop Publishing Using WordPerfect 5.0 & 5.1
Gehris and Setcavage Dictation Disc Company
Provides students with several desktop publishing activities. Teaches students to create professional looking documents using an easy step-by-step method. $

PFS: First Publisher Tutorial and Applications
Pasewark, Willis, and Pasewark, Jr. South-Western
Provides comprehensive instruction for PFS: First Publisher, a leading desktop publishing program. Beginning with thorough coverage of desktop publishing concepts, the text-workbook moves quickly into presenting the many features and capabilities of PFS: First Publisher.

Publish It! Tutorial and Applications, IBM Version/Apple Version South-Western
Introduces concepts and presents the unique and exciting capabilities of Publish It! in a simple-to-complex format. After mastering the concepts, students complete end-of-chapter activities designed for reinforcement. $$

828

Understanding Microcomputers and Application Software

Bergerud, Busche, and Gonzalez South-Western

Offers comprehensive, state-of-the-art coverage on everything from word processing to integrated software and desktop publishing. $$

Ventura Publisher 2.0: Concepts and Applications for the Desktop Publisher

Auvil and Stewart South-Western

Ideal for classroom, laboratory, and individual study. It is an efficient tool for learning one of the most powerful desktop publishing software packages available. It is designed to help students understand how to use the power of Ventura without being overwhelmed by its many capabilities. $$

Videos

Canvas: Video 1

MacAcademy

Learn basic tools and palettes, multiplex tools, menus and preferences, object (drawing) and bitmap (painting) concerns, grouping and locking objects, drawing order: shuffling, paste priorities, bezier curves: creating and editing, setting defaults, patterns sets, and foreground and background color use. $$

Canvas: Video 2

MacAcademy

Learn working with text, creation and modification, text on paths, encrusting, slanting, scaling, creating and manipulating, text outlines, text rulers, tabs formatting, leading, spell checking, special edit managers and tools, duplication of objects, auto tracing, layers and the layer manager, etc. $$

Canvas: Video 3

MacAcademy

Learn multiple object transformations, gradient fills—use and creation, blending objects, combining and slicing objects, creation of presentation slide shows, dimensioning drawings, use of hatch (cross-section) patterns, separations for printing negatives, and system 7.0 special options. $$

Design and Layout Techniques for Desktop Publishers

MacAcademy

Buying a popular desktop publishing program doesn't automatically make us desktop publishers. A dynamic video full of hands-on hints, layout techniques, do's and don'ts, and professional design guidelines. It is for anyone using a graphics, design, or DTP program. $$

FreeHand: Video 1

MacAcademy

You will learn accessory files, using tools, backgrounds, printing options, graphics, palettes, defining colors, graphic tools, tints and shadows, rotation tool, grouping and layering, file menu, power duplication, and document setup. $$

FreeHand: Video 2

MacAcademy

You will learn custom colors, removing colors, creating styles, fill effects, type menu, fill menu, color menu, text on path, blending, composite graphics, and clipping paths. $$

FreeHand: Video 3

MacAcademy

You will learn layer managers, print specs., page setup, importing graphics, graphic tricks, blending colors, placing graphics, element information, overprinting, blending paths, and auto trace. $$

Illustrator: Video 1

MacAcademy

You will learn installation, components, selection tools, rectangle tools, oval tools, pen tool, grouping, ungrouping, paint menu, scaling tool, rotation tool, reflection tool, shearing tool, preferences, curves, conv. direction point, and pen tool. $$

Illustrator: Video 2

MacAcademy

You will learn opening program, windows, blending tool, make guide, scaling tool, rulers, graph paper, blending point, masking, auto tracing, text, text creation tool, custom fonts, and text paths. $$

Illustrator: Video 3

MacAcademy

You will learn separator, densitometer chart, type fonts, pantone colors, type manager, compound paths, cutting types, type manipulation, blending type, page layouts, custom patterns, and graphs. $$

Introduction To Desktop Publishing

Teaching Aids Inc.

Focusing on the beginning student, the video introduces key terminology with numerous over the shoulder on-screen examples. Students see how desktop publishing fits into the overall business picture and understand that publishing with computers is a skill that soon will become a basic business skill. $$$$

Lotus 1-2-3 "Graphs"

Teaching Aids Inc.

Shows you how to use the graph feature of Lotus 1-2-3. You will define data ranges, create pie charts, bar charts, and stacked bar charts. The power of graphs explained with easy step by step examples. $

MacDraw Pro: Video 1

MacAcademy

You will learn program, translators, slide show, help, tools, painting, and pen tools, color appets, editing patterns, fills, text, object creation, polygon preferences, arc tool, drawing sizes, bezier tool, and import/export. $$

MacDraw Pro: Video 2

MacAcademy

You will learn importing charts, eye dropper tool, rulers, grouping, slide presentations, layer management, importing objects, gradient manager, editing colors, importing text, note tool, text ruler, EPS file, libraries, gradients, and drawing order. $$

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PageMaker: Video 1

MacAcademy

You will learn desktop publishing tips, document set-up, margins/page options, page views, ruler/guide set up, using master pages, using column guides, using the tool box, layering text/graphics, headlines, graphics, creating reverses, placing graphics, placing text, and text blocks/strings. $$

PageMaker: Video 2

MacAcademy

You will learn setting preferences, creating shadow boxes, creating drop caps, using in-line graphics, inserting/deleting pages, text options, leading/kerning, creating pull quotes, forced justification, text rotation, paragraph options, using table editor, and manual kerning. $$

PageMaker: Video 3

MacAcademy

You will learn using story editor, using spell checker, search/replace, creating style sheets, new styles, using image control, text wrap options, color options, printing options, saving options, linking features, on-line help, using templates, and tips and tricks. $$

QuarkXPress: Video 1

MacAcademy

You will learn components, preferences, boxes, text manipulation, creating graphics, using tools, linking text, modifying tools, modifying graphics, printing options, using color, and editing text. $$

QuarkXPress: Video 2

MacAcademy

You will learn windows, linking graphics, screening graphics, master pages, word processing, spell checking, font options, formatting, tracking modification, text wrap, in-line graphics, and dummy pages. $$

QuarkXPress: Video 3

MacAcademy

You will learn page set-up, importing graphics, grouping, feathering text, color items, format changes, color separations, coloring graphic, creating colors, pantone colors, trapping color, printing options, using screens, and completing layouts. $$

WordPerfect 5.0: A Complete Course

Dennis P. Curtin — Regents/Prentice Hall

Includes information on the basics, editing and formatting, merge-printing and document assembly, desktop publishing, and special features. $

Software—MS-DOS, Macintosh, Apple

Advanced WordPerfect 5.0-5.1: Tutorial and Applications, Including Desktop Publishing

Sullivan — South-Western

Now students who know WordPerfect basics can learn how to use the advanced features of the world's number one word processing program. This tutorial presents the advanced commands in WordPerfect 5.0 and 5.1 in an easy-to-follow, step-by-step fashion and gives students time-saving tips and techniques. They will also learn how to avoid common problems. $$ MS

Clip Art Folio: A Library of Desktop Publishing Art

South-Western

A versatile collection of almost 200 electronic clip art images in 15 categories created especially for students' use. It can be used with most popular desktop publishing software programs, most paint and draw programs, and high-end word processing programs. $$$ MS, MAC, AP

Desktop Publishing Applications: Macintosh/PageMaker

Holly Yasui — Paradigm

Hands-on guide to desktop publishing on the Apple. Macintosh provides step-by-step instructions for creating business documents on a personal computer. With the use of PageMaker desktop publishing software, learn to prepare individual projects and templates with style sheets for on-going projects. $ MAC

Desktop Publishing: Technology and Design

Holly Yasui — Paradigm

A practical text that will provide the student with a basic understanding of concepts and terminology for the production and design of professional quality publications with a desktop computer. $ MS

Desktop Publishing Tests for Desktop for WordPerfect 5.1

Margaret Brown — Dictation Disc Company

Evaluation tests problems on disks. Each test covers two to three functions to pinpoint deficiencies and key in on those functions that require remedial work. The tests are sequential and cumulative, they tell you the competency level of each student. Each test is given a point scale and time frame. Tests may be used with any book. $$ each MS

Desktop Publishing Using Pagemaker on the IBM-PC Version 4.0/MAC

Don Busche — Regents/Prentice Hall

Text covers the desktop publishing essentials of design, typography, graphics, and text. It contains step-by-step sample activities in each chapter plus a variety of hands-on drill and practice activities. $ MS, MAC

Desktop Publishing Using WordPerfect 5.0 & 5.1

Gehris and Setcavage — Dictation Disc Company

Evaluation tests problems on disks. Each test covers two to three functions to pinpoint deficiencies and key in on those functions that require remedial work. The tests are sequential and cumulative, they tell you the competency level of each student. Each test is given a point scale and time frame. Tests may be used with any book.

$$ each MS

Desktop Publishing with WordPerfect 5.1

Dennis P. Curtin — Regents/Prentice Hall

$ MS

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Simulations

Omega Desktop, Inc. — A Desktop Publishing Simulation
Boyce, Auvil, and Whitman South-Western
Pulls together the fundamental concepts of desktop publishing and lets students apply them in a realistic business environment. $$

Surfside Resort: A Business Publishing Simulation
Sullivan South-Western
Designed specifically for WordPerfect software users. As administrative assistants to the general manager of a beach resort, students complete various desktop publishing exercises. $

Wheels for Sale: A Computer Applications Simulation
Boyce and Boyce South-Western
Have fun completing 12 information-processing projects and learning about the uses of computers in real life. Updated to keep pace with the newest features in popular commercial software packages and presented in a simple-to-complex order, the projects cover word processing, database, mail merge, spreadsheets, electronic mail/telecommunications, graphing, integrated software, and desktop publishing. $$

Other

Transparencies of the Reference Manual for Desktop Publishing Using Wordperfect 5.1
Gehris and Setcavage Dictation Disc Company
$$$$$

Graphics

Reference Books

1-2-3 Graphics Techniques
Steve Sagman Que
The most effective methods for spreadsheet graphics and analysis! Features tips and techniques for high-quality graphs and other presentation material and packed with examples and illustrations. $

CorelDraw! Quick Reference
Que Development Group Que
Quick informative guide to creating impressive desktop artwork. Contains fundamental graphics and illustrations. $

Harvard Graphics Quick Reference
Que Development Group Que
Quick-access resource for improved business graphics. Vital command and function explanations for fast, easy learning. $

Que's Macintosh Multimedia Handbook
Bove and Rhodes Que
Great introduction to graphics, video, sound, and animation. Covers most popular Macintosh multimedia software. $

The Best Book of Harvard Graphics
John Mueller Sams
Provides a comprehensive tutorial on the basics of Version 2.3 of this top-selling graphics software. The author also includes insightful hints, tips, techniques, and a disk containing numerous chart examples. Features a detailed table of contents and index for easy reference and problem-solving. $

The First Book of Harvard Graphics
Jack Purdum Sams
Uniquely suited for the novice computer graphics user. Provides a quick-and-easy guide to the basics of using this popular software package. Plus, the effective Quick Steps tutorial, combined with end-of-chapter exercises, teaches the user how to master Harvard Graphics. $

The First Book of PC Paintbrush
Deke McClelland Sams
Designed especially for beginning user of PC Paintbrush, this uncomplicated guide provides a clear, step-by-step tutorial to maximize graphic creativity. An array of illustrations and inventive examples make this book an invaluable tool for desktop graphics! $

The First Book of PowerPoint for Windows
Douglas Snyder Sams
Beginners get a complete, sure-fire introduction to this popular new presentation graphics program. Quick Steps tutorials show how to produce top-quality charts, graphs, and business publications right away. Boxed tips and a command Quick Reference also make essential information easy-to-find. $

Using DrawPerfect
Stuart Bloom Que
Dozens of high-performance, results-oriented samples and techniques. Helps users create eye-catching bar, pie, line, and other informative graphs. $

Using Freelance Plus
Jim Meade Que
Quick Start tutorials ensure fast productivity. Features advanced techniques and numerous examples. $

Using Harvard Graphics, 2nd Edition

Sagman and Sandlar — Que

Hundreds of samples, charts, and graphs; step-by-step instruction; and a tear-out Menu Map. Discusses bar, pie, and line graphs and charts—plus advanced presentation tips. $

Using MacDraw

Marvin Bryan — Que

Includes techniques, tips, and shortcuts to improve desktop graphics. Covers layering, color usage, templates, and creating an object library. $

Using MacroMind Director

Bove and Rhodes — Que

Extensive coverage of animation, HyperCard, and interactive presentations. Expert examples and professional advice. $$

Using PowerPoint

Jim Meade — Que

Beginner's introduction to effective business presentations. Combines quick start tutorials and comprehensive command reference. $

Texts

Computer Explorations for Business

Goldman and Furjanic — Glencoe

Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphics tool. A telecommunications tool is simulated. Sophisticated equipment is not needed. $$$$$

Introduction to Business Graphics

Auvil and Auvil — South-Western

Provides thorough coverage of design elements to enhance publications through the use of business graphics software. Learn to prepare text charts and diagrams, statistical graphs, maps, logos and icons, cartoons, and realistic illustrations and to utilize these in desktop publications and presentations. $

Mactivities: Learning to Use the Macintosh Computer

Auvil — South-Western

As first-time Macintosh users, your students learn to produce documents efficiently and quickly with this introductory guide. This spiral-bound text is divided into two parts: the first part covers the Mac's operating system; the second part guides students through the basics of word processing and paint and draw graphics. $

Microcomputer Business Applications and Projects

Busche and Esbensen — Regents/Prentice Hall

Text enables readers to become comfortable with four application software areas: database management, word processing, spreadsheets, and business graphics and presents IBM computer-based activities. Contains extensive illustrations throughout. $

Using PFS: First Choice Tutorial and Applications

Drum and Jansen — South-Western

Guides students through PFS: First Choice, the integrated software program that operates as word processor, file manager, spell checker/thesaurus, spreadsheet, graphics generator, and electronic communication to other computers. $$

Text Workbooks

Information Processing Applications for the Microcomputer

Clark, Allen, and Klooster — South-Western

Provides instruction and applications for the correlated software, containing programs for inventory, payroll, graphing, loan amortization, simulated telecommunications activities, and games related to computer concepts. $$$

Videos

Microsoft PowerPoint: Video 1

MacAcademy

You will learn sample slides, slide changer, title sorter, color, creating slides, slide masters, graphics, spell checker, label tool, tabs, genigraphics, auto slides, handouts, speaker notes, story board, printing, and tips and tricks. $$

Paint and Draw

MacAcademy

You will learn type of programs available, tool palettes, creating graphics, screen dumps, using the clipboard, grouping graphics, paint tools, paint special effects, draw special effects, and proof prints. $$

Persuasion: Video 1

MacAcademy

You will learn program installation, creating presentations, auto templates, slide outline, editing text, place holders, background masters, creating and using graphics, creating slide shows, charts and tables, draw tools, text and graphics, printing techniques, and output functions. $$

SuperPaint: Video 1

MacAcademy

You will learn preferences, tools, draw objects, line widths, creating tools, pattern tools, special paint tools, power keys, filling patterns, x-ray lasso, duplicate/replicate, view menu, option menu, plug ins, and selecting. $$

SuperPaint: Video 2

MacAcademy

You will learn paint menu, fill blending, text effects, paint effects, brush symmetry, air brush, draw layers, draw grouping, object information, bezier curves, super bits, and plug in tools. $$

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Software—MS-DOS, Macintosh, Apple

Clip Art Folio: A Library of Desktop Publishing Art
South-Western
A versatile collection of almost 200 electronic clip art images in 15 categories created especially for students' use. It can be used with most popular desktop publishing software programs, most paint and draw programs, and high-end word processing programs. $$$ MS, MAC, AP

Computer Explorations for Business
Goldman and Furjanic Glencoe
Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphic tools. A telecommunications tool is simulated. Sophisticated equipment is not needed. $$$$$ MS, AP

Information Processing Applications for The Microcomputer
Clark, Allen, and Klooster South-Western
Provides instruction and applications for the correlated software, containing programs for inventory, payroll, graphing, loan amortization, simulated telecommunications activities, and games related to computer concepts.
$$$ MS, MAC, AP

McGraw-Hill Graphing
Gregg/McGraw-Hill Glencoe
Gives users the power to present easy-to-understand visual representations of complex numeric data. the program offers the option of three graph styles—bar, stacked bar, and point. Each graph can display three sets of values, with each set being plotted at up to 12 intervals. $ MS, AP

Using PFS: First Choice Tutorial and Applications
Drum and Jansen South-Western
Guides students through PFS: First Choice, the integrated software program that operates as word processor, file manager, spell checker/thesaurus, spreadsheet, graphics generator, and electronic communication to other computers.
$$ MS

Telecommunications

Texts

Computer Explorations for Business
Goldman and Furjanic Glencoe
Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphics tool. A telecommunications tool is simulated. Sophisticated equipment is not needed. $$$$$

Data Communication, Networks, and Systems
Thomas C. Bartee, Editor Sams
Readers will learn the advantages and disadvantages of local area networks. Also covered are the operation of modems, multiplexers, and concentrators; the characteristics of fiber optics and coaxial cables; and the forces shaping the structure and regulation of common carrier operations. $$

Networking Personal Computers, 3rd Edition
Michael Durr and Mark Gibbs Que
Step-by-step resource for installation and practical network solutions. Essential information for networking MS-DOS systems with Macintosh machines. $

Secretarial and General Office Procedures, 2nd Edition
Lucy Mae Jennings Regents/Prentice Hall
Text presents office procedures in easy-to-understand steps. It covers audio, audiographic, and video teleconferencing techniques and suggests tips for coping with job related stress. $

Telecommunications: A Short Course
Dennis P. Curtin Regents/Prentice Hall
Part of Curtin's COMPASS series. It covers telecommunications using ProComm Plus as the example. $

The First Book of Modem Communications
Jack Nimersheim Sams
Written as a "primer" and not a technical reference, this book introduces readers to the concepts governing modem communications, discusses vital hardware and software components, and offers pragmatic advice on their use. $

Understanding Local Area Networks, 2nd Edition
Stan Schatt Sams
Using a technically oriented approach, this book provides an understanding of the theory behind the various types of network architecture and data transmission methods. It also provides an overview of the major LANs currently on the market, with reviews and compatibility ratings with other systems. $

Text Workbooks

Telecommunications: Concepts amd Applications
Cubbler, Olivo, and Scrogan South-Western
Provides the foundation for a 15 to 20 hour unit of instruction in this vital and changing area of technology. $$

Videos

Secretarial and General Office Procedures, 2nd Edition
Lucy Mae Jennings — Regents/Prentice Hall
Text presents office procedures in easy-to-understand steps. It covers audio, audiographic, and video teleconferencing techniques and suggests tips for coping with job related stress. $

Software—MS-DOS, Macintosh, Apple

Computer Explorations for Business
Goldman and Furjanic — Glencoe
Helps acquaint students with the functions of integrated, computerized business tools. In simulated job settings, students manipulate data using a simplified word processor, database, spreadsheet, and graphics tool. A telecommunications tool is simulated. Sophisticated equipment is not needed. $$$$$ MS, MAC, AP

Information Processing Applications for the Microcomputer
Clark, Allen, and Klooster — South-Western
Provides instruction and applications for the correlated software, containing programs for inventory, payroll, graphing, loan amortization, simulated telecommunications activities, and games related to computer concepts.
$$$ MS, MAC, AP

Microcomputers: A Practical Approach
Klemin and Harsha — Glencoe
For use in one- or two-semester courses, Microcomputers provides generic applications for spreadsheet, database, graphing, word processing, integrated, and communications software. $ MS, MAC

PC Power: Microcomputer Applications
Klemin and Harsha — Glencoe
A text-software program that supports a broad-based course in microcomputer concepts and applications. It provides students with the most complete hands-on PC training.
$ MS, MAC

Telecommunications: Concepts & Applications
Cubbler, Olivo, and Scrogan — South-Western
Provides the foundation for a 15 to 20 hour unit of instruction in this vital and changing area of technology.
$$ MS, MAC, AP

Wheels for Sale: A Computer Applications Simulation
Boyce and Boyce — South-Western
Have fun completing 12 information-processing projects and learning about the uses of computers in real life. Updated to keep pace with the newest features in popular commercial software packages and presented in a simple-to-complex order, the projects cover word processing, database, mail merge, spreadsheets, electronic mail/ telecommunications, graphing, integrated software, and desktop publishing. $$

Silver Unicorn: A Telecommunications Simulation
Dickey-Olsen — South-Western
Students work as executive assistants for Silver Unicorn, a nationwide chain of boutiques specializing in rare and unusual merchandise. Learn the various aspects of telecommunications in a business office environment. $$

Office Procedures

Reference Books

Paradigm Reference Manual
Branchaw and Bowman — Paradigm
Designed primarily for use as a supplementary text for all titles in keyboarding, shorthand, office procedures, word processing applications, machine transcription, business English, and business communications. $

Professional Reference for the Office
Rosemarie McCauley — Glencoe
This practical, easy-to-use handbook is for the contemporary business student and office worker. The information is current and covers a broad range of topics including practical and applied aspects of the Certified Professional Secretary (CPS) examination. $

Secretarial and General Office Procedures, 2nd Edition
Lucy Mae Jennings — Regents/Prentice Hall
Text presents office procedures in easy-to-understand steps. It covers audio, audiographic, and video teleconferencing techniques and suggests tips for coping with job related stress. $

Secretarial Technology—Office Technology Series
Instructional Materials
Three-volume series providing two hours of daily instruction for a one-year course. Covers skills needed for modern automated offices; decision-making, human relations techniques, performance patterns, and operations skills. $

Secretarial Technology—Office Technology Volume 1

Instructional Materials

Covers career opportunities, typing review, written communications, and transcribing. Includes 1990 revisions. $

Secretarial Technology—Office Technology Volume II

Instructional Materials

Covers performing internal services, oral communication skills, office procedures, organization skills, numerical/clerical records, and information/data processing. Includes 1990 revisions. $

Secretarial Technology—Office Technology Volume III

Instructional Materials

Covers job-seeking skills, client services, decision-making, personal development, problem-solving and product-to-client transactions. Includes 1990 revisions. $

The Electronic Office

Joyce Kupsh and Sandra Whitcomb Glencoe

$

Texts

Accounting Projects for the Electronic Calculator

Mildred Polisky Glencoe

Contains brief instruction in the touch method of operating an electronic calculator, five projects, and a key to the projects. This book is designed to be used with any accounting textbook. $

Administrative Office Management: An Introduction, 5th Edition

Zane K. Quible Regents/Prentice Hall

This very readable text incorporates the most significant changes affecting today's administrative office in the areas of technology and human resources. Students can quickly and thoroughly grasp the essentials of administrative office management. $

Administrative Procedures in the Electronic Office

Roseanne Bryce Sanders Regents/Prentice Hall

Text provides current data on state-of-the-art technology and equipment, and explores the procedures and skills needed to utilize those resources. It incorporates essential "how-to" procedures for improving dictation. $

Text Workbooks

Data Entry in Business: Concepts and Applications

Mel Hynek Glencoe

Provides applications and activities to familiarize students with the procedures for data entry used in modern business offices. The variety of these activities makes the program flexible for use in many different classes, and activities can be assigned in any order. $$$$$$

General Office Procedures

Wood and Sanders Glencoe

$

How to Use Adding and Calculating Machines

Walker, Roach, and Hanna Glencoe

$

Introduction of Office Automation

Charlene W. Sox Regents/Prentice Hall

$

Introduction to Information Processing, 4th Edition

Robichaud, Muscat, Hall Glencoe

Ideal for either a one-year or half-year introductory course in data/information processing, this program is especially designed for teachers and students who are new to the field. This edition offers a greater emphasis on microcomputers and software applications. $

Machine Transcription: A Comprehensive Approach for Today's Office

Carol Mitchell Glencoe

Introduces students to transcribing equipment and techniques, with emphasis on modern technology and decision making. Transcription assignments contain index displays, proofreading exercises, and an emphasis on modern technology and decision making. $

Microcomputers: Concepts, Skills and Applications

Flynn and Mandell West

Designed for versatility, this textbook of generic microcomputing essentials combines with any of the five software-specific Computer Skills Resource Guides to accommodate any classroom situation. This flexible supplement package gives you the freedom to change your software at any time. $

Modern Office Procedures for Administrative Support

Olive D. Church Regents/Prentice Hall

$$

Nine to Five at the Business Office

Joyce Twing Glencoe

$

Office Machines: A Practical Approach, 3rd Edition

McKenzie and Hughes Regents/Prentice Hall

This text teaches the touch method of keyboarding the Ten-Key Keyboard, the Electronic Printing Calculator, and the Electronic Display Calculator. It emphasizes developing speed and accuracy, performing the four basic mathematical functions, and applying skills to solve business problems. $

Office Procedures

Stewart, Blockhus, Reigel, and Schroeder Glencoe

$

Office Procedures and Management, 5th Edition

Moon and Cox Delmar

$$

Office Skills for the 1990s: The Finishing Touch
Barrett, Kimbrell, and Odgers — West

Focuses on the latest technology, skills, attitudes and careers: word processing, telephone procedures, recordkeeping, basic communication, math skills, and more. Practical, up-to-date information prepares students for working in today's offices. $

Office Systems and Procedures, 2nd Edition
Luke and Stiegler — Glencoe

Prepares students for the tasks of today's electronic offices—correspondence, filing, scheduling, and more. A new unit describes how the integrated electronic office increases efficiency throughout an organization. Activities help students refine basic skills. $

Procedures for Administrative Support in the Automated Office
Kutie and Rhodes — Regents/Prentice Hall

Offers students the skills needed to handle virtually every kind of task that may be required of them. It contains mini-simulations of office activities, with forms and working papers and clearly defines business terminology. $

Procedures for the Modern Office: An Application Approach
Simon and Chaney — Regents/Prentice Hall

$

Solving Business Problems on the Electronic Calculator, 3rd Edition
Mildred Polisky — Glencoe

Training students in the efficient use of the electronic calculator to solve common office problems is the goal of this consumable, spiral-bound text workbook. It is flexible enough for use with any model electronic calculator. $

Ten-Key Touch Drills
William Fewkes — Glencoe

Introduces the ten-key pad and then gives students a series of motivational drills to increase their speed. $

The Electronic Office
Kupsh and Whitcomb — Glencoe

$

The Electronic Office and You: Managing Your Productivity
LaNeta L. Carlock — Glencoe

Basic concepts for the electronic office are covered in the text workbook—the first of its kind—in 15 to 20 hours.

Transcription Skills for Business, 3rd Edition
Meyer and Moyer — Regents/Prentice Hall

The latest edition of this popular text/workbook includes a comprehensive review of the basic language skills necessary for effective and productive machine transcription. It motivates readers to proficiency by providing realistic experiences of transcribing, from a variety of business communication. $

Videos

Clerical & Administrative Support
Teaching Aids Inc.

Secretaries, cashiers, receptionists, bookkeepers and audit clerks, telephone operators, postal clerks—carriers and supervisors, insurance investigators, bank tellers, data entry keyers, and court reporters. $$$$

Modern Office Procedures for Administrative Support
Olive D. Church — Regents/Prentice Hall

$$

Procedures for Administrative Support in the Automated Office
Kutie and Rhodes — Regents/Prentice Hall

Offers students the skills needed to handle virtually every kind of task that may be required of them. It contains mini-simulations of office activities, with forms and working papers and clearly defines business terminology. $

Professional Office Procedures
Susan Cooperman — Regents/Prentice Hall

Text gives students all the skills they need for successful careers as administrative assistants in today's offices. It contains a series of activities in each chapter for accomplishing the tasks covered and presents realistic problems and situations that students will most likely encounter. $

Secretarial and Administrative Procedures, 3rd Edition
Lucy Mae Jennings — Regents/Prentice Hall

$$

Secretarial and General Office Procedures, 2nd Edition
Lucy Mae Jennings — Regents/Prentice Hall

Text presents office procedures in easy-to-understand steps. It covers audio, audiographic, and video teleconferencing techniques and suggests tips for coping with job related stress. $$$$

The Basics of Office Procedures
Teaching Aids Inc.

Takes a humorous look at the reasons for office procedures and basic skills needed to implement a smooth flowing office environment. Greeting clients, answering the telephone, tracking the office staff, using the procedures manual, understanding work flow procedures for production work, etc. $$$$

Software—MS-DOS, Macinitosh, Apple

Business Knowledge Skills I
Teaching Aids Inc.

Contains multiple choice, matching, and true/false questions. Today's office worker needs to be informed regarding certain basic business knowledge skills—those skills identified as inherent in all business occupation areas.

$$$ MS, MAC, AP

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Business Knowledge Skills II

Teaching Aids Inc.

Contains multiple choice, matching, and true/false questions. Provides additional practice to train your winning team!

$$$ MS, AP

Data Entry in Business: Concepts and Applications

Mel Hynek — Glencoe

Provides applications and activities to familiarize students with the procedures for data entry used in modern business offices. The variety of these activities makes the program flexible for use in many different classes, and activities can be assigned in any order. $$$$$$ MS

Microcomputer Activities for Recordkeeping

Glencoe

This is the first software that trains students for electronic recordkeeping used in today's offices. Eight on-the-job recordkeeping applications build students' skills at inputting

$ MS, AP

Simulations

Capitol Auditing Service: A Calculator Simulation, 2nd Edition

Ralph M. Holmes — Glencoe

Students work as auditing clerks in this 15- to 20-hour self-instructional simulation. Includes twenty-eight skill-building assignments. $

CompuHelp Inc.: An Office Simulation

Olive Church — Paradigm

Simulates the interdependent work of four office positions. Tasks for an office manager, receptionist, word/information processor, and data-entry clerk are generated from information provided in the package and from the work done by the students themselves. $

Lester Hill Office Simulation, 2nd Edition

Myron J. Krawitz — Glencoe

Lester Hill, an overwhelmingly successful, full-scale, model office simulation, offers your students varied job experience and a motivating learning environment—right in your classroom. $

Procedures for Administrative Support in the Automated Office

Kutie and Rhodes — Regents/Prentice Hall

Offers students the skills needed to handle virtually every kind of task that may be required of them. It contains mini-simulations of office activities, with forms and working papers, and clearly defines business terminology. $

SnoDrift Ice Cream Company: A Clerical In-Basket Project

Richard H. Wirth — Glencoe

Offers hands-on materials that provide good skills practice in all the basic clerical functions and some decision-making practice as well. You can use this flexible program in a variety of courses—office procedures, office practice, clerical blocks, or business machines. $

RPM Unlimited: A Business Machines Practice Set, 3rd Edition

Albertson and Hoyt — Glencoe

Set in a retail company specializing in stereo equipment, CDs, tapes, and other home entertainment products, it provides 66 jobs designed to improve students' skill in the use of calculators, microcomputers, and other business machines. $

Summit Enterprises: A Recordkeeping Simulation

Richard Lasselle — Glencoe

Fifteen to twenty hours of employment in a camping equipment company let students perform recordkeeping functions of seven entry-level positions.

Supreme Electronics, Inc.: A Capstone Office Simulation

William Patton — Regents/Prentice Hall

Here is a state-of-the-art practice set for office procedures that builds skills in handling administrative-assistant tasks, using a microcomputer and decision-making. The entire simulation takes about fifteen hours to complete and is designed as a final project. $

The Rankin Company: A Business Math Simulation, 2nd Edition

Joseph E. Sexton — Glencoe

$

The Receptionist

Joyce W. Twing — Glencoe

This 15- to 20-hour individualized program covers everything the future receptionist has to know in a clear, step-by-step manner. $

Worldwide Publishing, Inc.: A Microcomputer Applications Simulation

Fruehling and Weaver — Paradigm

Set in an electronic office, this 30-45 hour simulation gives students an opportunity to work for different departments using microcomputer applications. Students work with database, spreadsheet, graphics, and word processing software to practice solving business problems. $

Other

On-The-Job Business Letter

Teaching Aids Inc.

Two-sided 8½ X 11" form that teaches the user how to write a business letter. A sample letter is provided showing the main parts of a letter. The back of the form provides a situation for the user to write a business letter in the space provided.

$

Records Management Audio Visual Kit

Cox and Moon — Delmar

Created to introduce the philosophy, procedures, and language of records management to high school office education students, this teaching aid consists of 31 full-color slides and compact cassette tape. $$$$

Common Essential Elements

Careers

Reference Books

Get the Job You Want
Melanie A. Brown — Houghton Mifflin
Features self-assessment quiz to help students focus efforts, real job applications and employment tests that give a head start in today's competitive market, the secrets of projecting a professional image, and hundreds of personalized activities and success tips. $

The Job Hunter's Guidebook
Greene and Martel — Houghton Mifflin
Features samples and do's and don'ts that make resume writing easy, a self-assessment quiz, guides for crafting persuasive cover letters, effective interviewing techniques, and other tools to help applicants fully prepare. $

Texts

Advancing in the World of Work
Kimbrell and Vineyard — Glencoe
Takes special needs students one step further on the road to independence and helps them meet the daily world-of-work challenges with confidence. Its emphasis on building self-esteem promotes an "I can do it" attitude. $

Business Dynamics: An Introduction to Business and Occupations
Conover, Gordon, and Ramstetter — Glencoe
Introduces students to the working world and helps prepare them to make successful occupational choices. It encourages students to look more closely at themselves, study the basics of business, and apply the decision-making process to career and life-style choices. $

Career Skills, 2nd Edition
Plate and Volz-Patton — Glencoe
This second edition of this common-sense, teaching and learning program carries students through the first steps of career planning. $

Dealing with the Interview
Teaching Aids Inc.
Shows how to get ready for the interview, express competencies to the interviewer, and effective follow-up after the interview. $$$$

Key to Reference Cost

$	0-25
$$	26-50
$$$	51-75
$$$$	76-125
$$$$$	126-199
$$$$$$	200+

Downtown Deli
Teaching Aids Inc.
Contemporary drama about young people on their own for the first time and their problems (and some successes) on their jobs at the Deli. Problem situations and attitudes are very realistic. This is perfect for teaching employability skills to youth. $$$$

Effective Interview Skills
Teaching Aids Inc.
Job seekers learn basic skills that improve their interview performances dramatically. Provides a three-step approach for answering open-ended "problem" questions. $$$$

Exploring Career Options
Teaching Aids Inc.
Illustrates the best resources available for exploring career possibilities. Emphasis is placed on the value of the school guidance office as being the best place to begin the exploration process. $$$$

Entering the World of Work, 3rd Edition
Kimbrell and Vineyard — Glencoe
Designed specifically to help special needs students find work, develop career goals, and cope with life and the workplace. Developed for young people with reading problems and learning disabilities, text features a third- to fourth-grade reading level with larger type. $

How to Find and Apply for a Job
South-Western
In easy-to-understand language, this softbound text takes the reader through the job-finding process from personal inventory to interview follow-up. Information about recent government regulations affecting job applicants and prospective employees is included in this revision. $

Independent Study for the World of Work, 5th Edition
Kimbrell and Vineyard — Glencoe
Perfect for integrating job and life skills into your course. It is designed specifically for students in work-study programs who do not have regularly scheduled classes with a coordinator. Detailed step-by-step instructions and an eighth-grade reading level. $

Introduction to Business: Our Business and Economic World
Brown and Clow — Glencoe
Contains economic and business concepts that will help prepare students to make decisions as wage earners, consumers, and citizens in a market economy. Comprehensive program combines explanations of business and economic concepts with practical applications of those concepts. $

Job Finding Fast

J. Michael Farr — Glencoe

The job-search book for those job-seekers and career changers who are still uncertain about their career goals. This text covers the major steps in career planning and job finding, from identifying a job objective to organizing the day-to-day job search. $

Job Preparation

PSI Associates, Inc. — Regents/Prentice Hall

Offers basic information and individualized activities that teach readers skills needed to find and keep employment. Covers such topics as writing resumes and letters of application, where to look for a job, interviewing, and changing jobs. $

Letter of Application and Resume Using A Microcomputer

Jackson — South-Western

Provides complete coverage of the resume and letter-writing process using a computer-assisted instructional approach with a text-workbook and tutorial software. Learn what is included and not included in a letter of application and resume and how to properly format both. $

Surviving on the Job, 2nd Edition

Jay Como — Glencoe

Provides students 24 practical survival skills that workers most need for successful job retention. It develops student abilities with new survival skill exercises, more math and communication skill exercises, and contains a new "Meeting Employee Expectations" feature. $

Text Workbooks

Career Development

Harvey and Schutz — Paradigm

Provides performance-based instruction in career identification, resume development, interviewing, techniques, and on-the-job career development. $

Dress Right for Business

Nancy Golden — Glencoe

Designed to help the student build an attractive, affordable business wardrobe. It is suitable for a one to three-week unit in a course in leadership development or career preparation. $

Exploratory Business, 7th Edition

Grubbs and Ashman — Glencoe

Gives students the chance to experience job-related tasks in the areas of business that offer the greatest of career opportunities for beginning workers. $

Help with Finding a Job

Melanie Brown — Glencoe

Help with finding a job includes topics such as preparing for the job search, exploring job possibilities, writing a resume, and handling the interview effectively. $

Personal Skills

Chamberlain and Eubanks — Glencoe

Older students with poor reading skills can learn about the relationship skills they will need with this lively easy-to-read text. It focuses on basic skills and attitudes necessary for good relationships with family, friends, and coworkers. Text has more than 100 two-color photos and drawings. $

Planning Positive Careers

Marc Landy — Regents/Prentice Hall

Text is appropriate for use with a variety of student populations—recent high school graduates, vocational school students, those in their 30s and 40s making career changes. It prepares students to explore any kind of career path in any field. $

Practical Job Skills

John McHugh — EMC Publishing

A flexible approach to presenting the basics of how to get a job and keep it. Loaded with practical, hands-on material, this program will help students enter the job market with confidence. $

Resume Writing, A Complete Reference Guide

McCabe and McCabe — South-Western

Simplifies the resume-writing process by providing easy, concise, step-by-step directions reinforced with numerous examples. $

Solving Problems/Making Decisions

Daggett and Marrazo — South-Western

Prepares students for the work world as they develop practical skills for making decisions and solving problems. $

The Job You Want—How to Get It

Blackledge and Blackledge — South-Western

This unique text-workbook guides in planning for the job expected to acquire. Meaningful activities and illustrations are included in each part. $

The Working Citizen

Safford — South-Western

Twelve short chapters and integrated student activities provide students with information for the work world. $

World of Work Curriculum Activities Workbook

Teaching Aids Inc.

May be duplicated by the instructor(s) for use in a single building. It contains on-the-job work assignments, crossword puzzles, and classroom learning activities. $$

Your Attitude Counts

Fruehling and Oldham — Paradigm

A nuts and bolts primer in the field of business human relations. It teaches the importance of good working relationships for career success and illustrates how attitude affects human relations. $

Your Future: Plans and Choices

Daggett — South-Western

Prepares students for adult responsibilities as family members, consumers, home managers, and wage earners. $

Videos

10 Easy Ways to Lose Your Job!

Teaching Aids Inc.

Using the format of a drama, plus comments from a career education specialist, this video explores the most common reasons young people are fired from entry-level positions. Among the topics illustrated are socializing on the job, not understanding the job description, and repeating mistakes. $$$$$

Before Tomorrow Becomes Today

Teaching Aids Inc.

This live-action VHS video encourages proper planning to realistically determine and attain one's life and employment goals. Discusses the types of education and training required for skilled and unskilled jobs. Leads the viewer through planning his/her life and career goals. $$$$

Career Exploration and Planning Program (CEPP)

Teaching Aids Inc.

Four video tapes that present concepts of career exploration, interests, temperament, and aptitudes. Titles are: Your Future: Planning Through Career Exploration; Your Interests: Related To Work Activities; Your Temperaments: Related To Work Situations; and Your Aptitudes: Related To Learning Job Skills $$$$$$

Career Goals: Your Ladder to Success

Teaching Aids Inc.

Students explore the suitability of careers based on self-evaluation, and career experience through demonstration of various circus acts. By taking a realistic look at themselves, and by examining the qualifications for various careers, students learn how to make wise decisions regarding career choices.

$$$$

Career Insights

Teaching Aids Inc.

A library of career overview video tapes specifically designed to present invaluable insights on occupations of interest to high school and college students. Presents details of the skills employed in each job as well as interviews with persons employed in various career fields. $$

Career Planning Steps

Teaching Aids Inc.

Shows the differences between a job and a career using real-life examples. Instruction in the areas of research, self-examination, and career center utilization are provided. The training/education requirements and general job search techniques are discussed. $$$$

Career Planning: Putting Your Skills to Work

Teaching Aids Inc.

Helps students assess their interests, abilities, personality styles, and personal values in a step-by-step format. Then it shows how they can use this assessment as an individual guideline for making career choices that match their unique characteristics and preferences. $$$$$$

Dealing with the Interview

Teaching Aids Inc.

Shows how to get ready for the interview, express competencies to the interviewer, and effective follow-up after the interview. $$$$

Downtown Deli

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Contemporary drama about young people on their own for the first time and their problems (and some successes) on their jobs at the Deli. Problem situations and attitudes are very realistic. This is perfect for teaching employability skills to youth. $$$$

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Exploring Career Options

Teaching Aids Inc.

Illustrates the best resources available for exploring career possibilities. Emphasis is placed on the value of the school guidance office as being the best place to begin the exploration process. $$$$

Expressing Your Competencies

Teaching Aids Inc.

Covers selecting an appropriate job objective, identifying and expressing technical competencies, designing an effective resume, and communicating skills to an employer. $$$$

Find the Job World

Teaching Aids Inc.

Assists in planning and organizing an effective job search process by learning at least eleven sources to look for job openings, to understand the importance of persistence and quick follow-up during the job search, and to learn four ways to follow-up job leads. $$$$

Finding a Company That's Right for You

Teaching Aids Inc.

This up-beat, fast-paced docu-style video emphasizes that viewers need to understand and consider the company structure as one of their career considerations. Look inside actual companies as they go about their daily routine. Visit work sites from three completely different work situations.

$$$$

Getting Hired and Advancing

Teaching Aids Inc.

Includes information on the interview and on climbing the ladder to success. $$

How to Succeed in the Changing Workplace

Teaching Aids Inc.

Explains what has happened to American business during the past several decades and why. Takes viewers to some of our country's most successful corporations to see how their employees have adapted to changing circumstances and new challenges. $$$$

Identify Your Skills: A Job Search Essential

Teaching Aids Inc.

Knowing your skills is important to select the right job and to do well in interviews where over 90% of job seekers can't describe their skills. This video show specific activities to help identify hundreds of skills. $$$$

If You Really Want to Get Ahead

MarkED

This program offers hundreds of ideas on how to manage smarter, get along with people better, and recognize and apply those things that are vital to professional growth. Divided into segments, this program may be used for group or individual training. $$$$

Introduction to Business: Our Business and Economic World

Brown and Clow — Glencoe

Contains economic and business concepts that will help prepare students to make decisions as wage earners, consumers, and citizens in a market economy. Comprehensive program combines explanations of business and economic concepts with practical applications of those concepts. $

Investigating the World of Work

Teaching Aids Inc.

Matches the knowledge of self (goals, values, interests, temperaments, etc.) with job requirements. Utilizes available resources in identifying and selecting career groups. $$$$

Job Line Report 2: How to Interview for A Job

Teaching Aids Inc.

A partial talk show format with teen hosts who have older "expert" guests. Guests critique what's right or wrong with sample interview scenarios. $$$$

Job Search Methods that Get Results

Teaching Aids Inc.

The two best methods—networking and direct employer contact—are emphasized along with techniques for finding those hidden jobs. $$$$

Job Search Preparation

Teaching Aids Inc.

Focuses on assessing skills and experiences and deciding at what kinds of jobs and companies the viewer will enjoy and succeed. Videos emphasize what recruiters look for in a resume, how to prepare an effective resume, use references, and write cover letters. $$$

Job Survival Skills: It's a Jungle Out There!

Teaching Aids Inc.

The job market really is a jungle of sorts, and workers have to learn the ropes (vines?) to survive. Getting ahead is a different bag of coconuts entirely. Yet there are things that can increase a person's chances for job survival and success. $$$$

Job World Literacy

Teaching Aids

Helps learn why workplace literacy is important to employers and success on the job. Teaches about different types of office equipment found on most jobs including copiers, FAX machines, telephones and computers. Covers how to write a business letter containing all the necessary components, etc. $$$$

Jobs for the 21st Century

Teaching Aids Inc.

This live-action video will help viewers make sense of their options and find a systematic way to identify careers that fit particular interests and aptitudes. Factual narration and interviews with experts give students a starting point from which they can begin to make intelligent choices. $$$$$$

Keys to Job Success

Teaching Aids Inc.

Illustrates how to keep jobs, how to get along with the boss, with others, and with the organization. $$$$

Know Your Skills

Teaching Aids Inc.

Topics include specific job skills, transferable skills, and good worker traits. Keys to success are a positive attitude and persistence. $$$

Mirror Mirror

Teaching Aids Inc.

Topic is non-traditional careers for women. Features a young eighth-grade female talking to her reflection in the mirror. It is her reflection that enlightens the young student to take a long look at her attitudes and perspectives concerning her chosen high school subjects and limited career outlook. $$$

Negotiating the Job Offer

Teaching Aids Inc.

Teaches the job seeker to be a detective when negotiating an offer. Viewers learn how to set a salary range, negotiate a compensation package, find out long-term earning and advancement potential, and decide if an organization is right for them. $$$

Occupational Preparation

Teaching Aids Inc.

Developing and implementing a training program stressing course selection and sequencing. Views various postsecondary school educational and training options. $$$$

Organize Your Job Search: The Key to Getting a Good Job Fast

Teaching Aids Inc.

Common sense techniques make the job search a job itself: weekly and monthly calendars, sample daily schedules, follow-up cards and a "tickler" card file reminder system. These cut job search time in half! $$$$

Paper Job Search Tools: From Resumes to Applications

Teaching Aids Inc.

Tips are provided on the best ways to use paper job search tools to get interviews. Resume basics—with examples—cover how best to create and use chronological or "skills" resumes. Also includes tips for completing applications that will reduce the chances of being screened out. $$$$

Personality on the Job: Why People Work

Teaching Aids Inc.

How personality effects work habits is the emphasis of this program. It looks at how to motivate different personality themes in the work environment and discover why some jobs are more suited to certain personalities. (15 minutes) $$$

Plan for Success

Teaching Aids Inc.

Specific and precise terms are used to show HOW to reach a career goal working within the system without going bananas. $$$$

Positive Attitudes I: Getting a Job

Teaching Aids Inc.

This live-action video emphasizes how a positive attitude in preparing for the job search increases the chances for employment. Stresses the importance of a positive self-concept during the interview. Provides helpful tips for exhibiting a positive attitude. $$$$

Positive Attitudes II: Keeping a Job

Teaching Aids Inc.

More people lose their jobs due to a lack of a positive attitude than a lack of needed job skills. Stresses the positive attitudes necessary to keep a job. Included are accepting constructive criticism, keeping a good appearance, willingness to improve skills, and being considerate of co-workers. $$$$

Preparing NOW for Success in the Future

Teaching Aids Inc.

Discusses the importance of careful planning when pursuing educational and training options. Reinforces the need for sound high school class selection by illustrating that all high school courses are related to the world of work. $$$$

Self Awareness and Your Career Options

Teaching Aids Inc.

How to organize information about yourself to properly present your qualifications. Involves the realistic understanding and setting of goals. $$$$

Successful Interviewing

Teaching Aids Inc.

Discusses preparing for the interview, answering and asking questions from the interviewer, what recruiters look for, how to show control during different interviewing techniques, and how to communicate strengths. $$$

Technical Occupations

Teaching Aids Inc.

Clinical Laboratory Technicians, Medical Records Technicians, Electrical Engineering Technologists, Drafters, Chemical Technologists, Air Traffic Controllers, Computer Programmers, Technical Writers, Computer Operators, Computer and Peripheral Equipment Operators. $$$$

The Basic Guide for Your Job Search

Teaching Aids Inc.

Prepares you to land the job you want. Discover the formula to a successful job search. Program was written with the expertise and knowledge of a counselor and career planning specialist, the street smarts of a placement center agency professional, and the know-how of a professional image consultant. $$$$

The Empowered Worker: Doers and Planners

Teaching Aids Inc.

Takes viewers to a company that has recently empowered its workers. See the effects of empowerment and how to successfully meet the challenges of empowerment at the company. $$$$

The Tough New Labor Market — and What It Takes to Succeed

Teaching Aids Inc.

Presents an overview of labor market trends. Describes the fastest growing jobs for the 90's and the rapidly declining occupations. Reinforces the need for education and training and provides practical suggestions for career planning. $$$$$

The Video Guide to Occupational Exploration

Teaching Aids Inc.

An informative, entertaining, and comprehensive series of 14 video programs covering each occupational cluster. Organized according to the 12 interest areas covering all 66 worker trait groups utilizing an easy-to-comprehend and enjoyable format. $$$

The Business Plan: Your Road Map for Success

MarkED

An excellent overview of how a business plan can be used to enhance a business's potential for success. Relatively high level, but may be used in segments. Viewers are introduced to the seven steps of a successful business plan. $$

The Work Place

Teaching Aids Inc.

Tips for success on first jobs from employers. Managers tell what they look for and expect from their entry-level workers. Managers from McDonald's, UPS, a retail tire store, a restaurant, a discount store, a honey producer, and a bank teller teach employer expectations, job survival skills, etc. $$$$

Uncovering Job Opportunities

Teaching Aids Inc.

Shows how to use effective job search resources, utilizing the telephone, and designing effective letters of inquiry. $$$$

Vocational Visions Career Series

Teaching Aids Inc.

Designed to increase career awareness by providing high school and vocational students with information that will help them make appropriate career decisions. Includes interviews with people in various occupations to provide useful information in a lively and personal format that makes viewing fun. $$

Where Do I Fit In?

Teaching Aids Inc.

Emphasizes the importance of personal information gathering as the first significant step in determining how one fits into the workforce of the 21st century. The significance of interests, goal-setting, personality style, preference for specific work activities, etc. $$$$

Why Work? Six Reasons Why You're Better Off Employed

Teaching Aids Inc.

The employed lifestyle is better, unemployment provides no opportunity for advancement, we are more employable when employed, we are positive role models for our children, we have higher self-esteem, and there are programs to help with the transition to working. $$$$

You and Your New Job

Teaching Aids Inc.

This three-part video series teaches job survival skills for first-time and semiskilled employees. Videos include: Getting a Good Start, You and Your Coworkers, and Working with Your Supervisor. $$$$$$

Your Educational Skills: Don't Leave Home Without Them

Teaching Aids Inc.

This live-action video discusses the necessity of developing adequate educational skills and illustrates how math, language and reasoning competencies are related to being successful in the world of work. $$$$

Your Job: Now It's Up to You

Teaching Aids Inc.

Emphasizes the importance of proper actions, work habits, and attitudes in keeping a job. Describes the many expectations of employers and coworkers. Emphasizes the ways to make a good impression on supervisors and coworkers. Stresses the importance of developing good working relationships. $$$$$$

Your Vocational Job Search Campaign: Successful Guerrilla Tactics

Teaching Aids Inc.

Conducting a successful job search requires the same steps as running an effective military campaign. The job seeker must know their enemy, plan a strategy, pull out the big guns, disarm the competition, and prepare for the main offensive. $$$$

Software—MS-DOS, Macintosh, Apple

Choices and Goals

Morris, Ryan, and Ryan

Glencoe

This software program allows career preferences to be explored. It provides a personalized, three-page profile printout. No computer experience is needed to operate this easy-to-use program. $$$$$ AP

Introduction to Business: Our Business and Economic World

Brown and Clow

Glencoe

Contains economic and business concepts that will help prepare students to make decisions as wage earners, consumers, and citizens in a market economy. Comprehensive program combines explanations of business and economic concepts with practical applications of those concepts. $ MS, AP

Life and Career Planning

Teaching Aids Inc.

Emphasizes the importance of deciding upon one's desired lifestyle and the need for making plans to achieve that lifestyle. Orients the user to the difference between skilled and unskilled jobs and the various skill requirements of each. $$$$ MS, AP

Succeeding in the World of Work

Teaching Aids Inc.

Contains multiple choice, matching, and true/false questions. This package is suitable for any instructional area, particularly cooperative training programs. Topics include: job applications, interview techniques, work attitudes, values and goals, work habits, career clusters, etc. $$$ MS, AP

Simulations

CompuHelp Inc.: An Office Simulation

Olive Church

EMC Publishing

This package simulates the interdependent work of four office positions. Tasks for an office manager, receptionist, word/information processor, and data-entry clerk are generated from information provided in the package and from the work done by the students themselves. $

Introduction to Business: Our Business and Economic World

Brown and Clow

Glencoe

Contains economic and business concepts that will help prepare students to make decisions as wage earners, consumers, and citizens in a market economy. Comprehensive program combines explanations of business and economic concepts with practical applications of those concepts. $

Software Solutions, Inc.: A Practice Set for the Electronic Office

Fruehling and Weaver

EMC Publishing

Designed to prepare students to enter the job market as "state-of-the-art" office support workers. $

Other

Career Exploration Kit

Teaching Aids Inc.

Invites the user to experience a variety of careers by participating in group and individual projects. Activities which seek to reproduce real-world situations guide the user to discover a career that can be both creative and productive. Enables the student to develop good work skills. $

Career Guidance Posters

Teaching Aids Inc.

Topics include traits and jobs, your personality, government resources, community resources, school resources, attitudes for job hunters, words-occupations, job search skills, job and school courses, kinds of jobs, your career plan, some job sources, etc. Eighteen posters in all. $$

Discover Yourself, Discover Job Charts

Teaching Aids Inc.

Titles of the 10 wall charts include: What do I like?, What am I like?, Why do I study?, How should I study?, What jobs fit my interests?, How do I find a job?, DOT: how do I apply for a job?, How can I look good?, What do I say?, and Now that I'm hired—What do I do? $$

Goal Planning

Teaching Aids Inc.

These 8½" X 11" printed forms (both sides) challenge participants to set goals and build steps to reach them. Encourages the planning of 5, 10, and 20 year goal levels. $

Getting A Job, Process Kit
Zedlitz — South-Western

Offers an organized approach to finding and securing the jobs wanted. It has been completely updated to address current job search techniques. $

The Employability Inventory
Teaching Aids Inc.

A self-assessment instrument providing students the opportunity to determine how they would react to various situations regarding getting and keeping a job. Sixty-eight cards with a situation with four possible answers are listed on the front of the card. The correct answer is on back. $

The Work Experience Planner
Stull and Zedlitz — South-Western

Gives the most complete, step-by-step job training possible. This easy-to-understand text-workbook takes you through 30 activities pertaining to on-the-job experiences. $

Entrepreneurship

Text Workbooks

Business Ethics and Etiquette
Teaching Aids Inc.

In the world of business there is an emphasis being placed upon the need for proper business ethics and etiquette. Interesting ethical issues of great concern to society have been raised. Conflicts often arise between what is the law and what many feel is morally right. $$$

Entrepreneurship, 3rd Edition
Ely, Berns, and Popo — Glencoe

Reflects current practices and trends through use of real-life applications and examples from successful business people. It offers competency-based instruction to guide students through the steps of developing a business plan for a new small business. $

Entrepreneurs for the Future
Teaching Aids Inc.

Brings the exotic sounding word down to the student level—exploring the many possibilities open to people at all levels of employment. Introduces the basics of getting started with that one great idea, acquiring start-up money, pitfalls of cash flow, managing people, marketing strategies, etc. $$$$

Entrepreneurship: The World of Small Business
Sarah Riehm — West

This highly motivational, activity-filled text will capture the students' imaginations and hold their interest as they are immersed in the entrepreneurship experience: devising business and marketing plans, conceptualizing operations, developing several types of advertising, etc. $

Introduction to Business: Our Business and Economic World
Betty Brown, John Clow — Glencoe

Contains economic and business concepts that will help prepare students to make decisions as wage earners, consumers, and citizens in a market economy. Comprehensive program combines explanations of business and economic concepts with practical applications of those concepts. $

Introduction to Business
Teaching Aids Inc.

Introduces the language of business to cover the basic terms students need to master. Students are led behind the scenes of a dynamic manufacturing company. This highly organized video will entertain your students as well as teach them the basics in the areas of accounting, production, etc. $$$$

Money Management
PSI Associates — Regents/Prentice Hall

A basic handbook on dollars and sense to help students practice the skills needed to fill out tax forms. $

Risks and Rewards of Entrepreneurship
M. Catherine Ashmore — EMC Publishing

What does it take to become an entrepreneur? This outstanding program tackles this challenging question with material that is as stimulating as it is practical. $

844

Management

Reference Books

Effective Business Psychology, 3rd Edition
Andrew J. DuBrin — Regents/Prentice Hall
Text helps students develop proficiency in such interpersonal skills as how to motivate people, how to criticize others constructively, and much more. It discusses practical intelligence and cross-cultural factors in work relationships. $$

Human Relations for Career and Personal Success, 3rd Edition
Andrew DuBrin — Regents/Prentice Hall
Text illustrates applications of human relations skill though numerous case examples. It includes new topics such as the role of motives and needs in self-motivation, wellness, employment and drug testing, and more. It reflects the major issues in human relations. $$

Human Relations In Industry: People at Work
Jayne P. Crolley — Regents/Prentice Hall
$$

Office Procedures and Management, 5th Edition
Moon & Cox — Delmar
$$

Small Business Management, 4th Edition
Hubbard & Hailes — Delmar
$

Supervision: Techniques and New Dimensions
Alfred W. Travers — Regents/Prentice Hall
Text explores broad concepts and overall strategies for supervisory success. It offers solid, practical tips and techniques on how to plan and organize, motivate and lead, interview and train, and more. $$

Supervision: The Art of Management, 3rd Edition
Frunzi and Halloran — Regents/Prentice Hall
$$

Videos

I'm Tired of a Messy Desk!
Teaching Aids Inc.
This video will help you and your viewers organize your desks for maximum use of space. Offers concrete tips on increasing personal work space efficiency. Common desk items which can break the flow of concentration are presented such as where to position personal items. $$$$

Software—Apple

Time Management...A Student's Guide
Teaching Aids Inc.
This interactive tool assesses the organizational and time management skills of the student and supports the development of a personalized time management program with graduation as the ultimate goal. $$$

Other

The School Planner: A Time Management Program
de Anda and Vivell — South-Western
Learn to budget time wisely with the aid of both an instruction book and a consumable planner. $

Texts

Administrative Office Management: An Introduction, 5th Edition
Zane K. Quible — Regents/Prentice Hall
This very readable text incorporates the most significant changes affecting today's administrative office in the areas of technology and human resources. Students can quickly and thoroughly grasp the essentials of administrative office management. $

Applied Human Relations: An Organizational Approach, 4th Edition
Benton and Halloran — Regents/Prentice Hall
Text examines organizational values such as ethics, commitment, honesty, and integrity. It offers a reexamination of scientific management and other outdated strategies and explores areas such as barriers to communication. $

Career Development: Taking Charge of Your Career, 2nd Edition
Monica E. Breidenbach — Regents/Prentice Hall
Provides a systematic, practical method for analyzing skills and talents—focusing on developing a career goal, a functional resume, and a workable action plan for the marketplace. Discusses self-analysis, tools development, market analysis, interviewing techniques, future career planning and more. $

Effective Business Psychology, 3rd Edition
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Text illustrates applications of human relations skill though numerous case examples. It includes new topics such as the role of motives and needs in self-motivation, wellness, employment and drug testing, and more. It reflects the major issues in human relations. $$

Human Relations: A Job Oriented Approach, 5th Edition
Andrew DuBrin — Regents/Prentice Hall
$$

Human Relations in Industry: People at Work
Jayne P. Crolley — Regents/Prentice Hall
$$

Personality Development

Texts

Applied Human Relations: An Organizational Approach, 4th Edition
Benton and Halloran — Regents/Prentice Hall
Text examines organizational values such as ethics, commitment, honesty and integrity. It offers a reexamination of scientific management and other outdated strategies and explores areas such as barriers to communication. $

Bridges to Success: A Life Skills Series
PSI Associates, Inc. — Regents/Prentice Hall
Designed to help readers in transition bridge the gap between dependence and independence. $

Career Development: Taking Charge of Your Career, 2nd Edition
Monica E. Breidenbach — Regents/Prentice Hall
Provides a systematic, practical method for analyzing skills and talents—focusing on developing a career goal, a functional resume, and a workable action plan for the marketplace. Discusses self-analysis, tools development, market analysis, interviewing techniques, future career planning and more. $

Exploring Careers in Business
Instructional Materials
Covers career exploration, personal qualities for the work world, sources of information, occupational requirements and developing a career plan. $

Human Relations: A Job Oriented Approach, 5th Edition
Andrew DuBrin — Regents/Prentice Hall
$$

Independent Living
PSI Associates, Inc. — Regents/Prentice Hall
Provides a simple guide to daily living that explains the basics of personal hygiene, nutrition, managing leisure time, finding a place to live, and living on a budget. Starts with a chapter on self-respect, emphasizing that a sense of self-worth is essential to an independent life. $

Personality On the Job: Why People Work
Teaching Aids Inc.
How personality effects work habits is the emphasis of this program. It looks at how to motivate different personality themes in the work environment and discover why some jobs are more suited to certain personalities. (15 minutes) $$$

Successful Self-Management
MarkED
An excellent guide for achieving success by taking charge of your personal and professional life. This program provides a blueprint for you to assist your students as they evaluate their progress on the road to success. $$$$

Text Workbooks

Bridges To Success: A Life Skills Series
PSI Associates, Inc. — Regents/Prentice Hall
Designed to help readers in transition bridge the gap between dependence and independence $

Creativity in Business — MarkED
$

Developing Positive Assertiveness — MarkED
$

Memory Skills in Business — MarkED
$

Personal Skills
Chamberlain and Eubanks — Glencoe
Older students with poor reading skills can learn about the relationship skills they'll need with this lively easy-to-read text. It focuses on basic skills and attitudes necessary for good relationships with family, friends, and coworkers. Text has more than 100 two-color photos and drawings. $

Personal Time Management
MarkED
$

Successful Self-Management: Personal Effectiveness
MarkED
$

Thinking Skills for Success
Dr. Edward deBono — EMC Publishing
The program you need to truly prepare your students for the decisions they must make in an increasingly complex world. It will help your students learn, develop, and practice their thinking skills within the context of their practical applications.
$

Working at Human Relations, 2nd Edition

Fruehling and Oldham Paradigm

Gives students an understanding of the connection between human relations and success or failure in finding a satisfying working life. Whether or not your students have much work experience they will be able to apply the ideas and concepts in this text workbook to their own life experiences. $

Videos

It's Not Just Courtesy—It's The Law

Teaching Aids Inc.

Demonstrates how to handle unwelcome behavior, including sexual innuendoes, remarks, unwanted physical contact or demands for sexual favors in return for employment advancement. Candid vignettes help students understand the impact sexual harassment can have on individuals and organizations. $$$

Constructive Communications

Teaching Aids Inc.

This program introduces step-by-step procedures for making verbal communication EASY. Know the (E)ffect you want to achieve. Understand your (A)udience. Know your (S)ubject matter. Know how you can best present (Y)ourself. $$$$

Easy Business

Teaching Aids Inc.

A Hal Roach style comedy. Shot in the 1920's style of film making. This program follows the adventures of two slapstick characters remodeling a ramshackle house. Use this video to show what happens with good intentions, lack of communications, and the inability to get along. $$$$

Everyone a Problem Solver

Teaching Aids Inc.

The ability to solve problems could be the most important skill your students can bring to their first job, and all the other jobs they'll have. $$$$

First Time Out

Teaching Aids Inc.

Entertaining and realistic drama about the problems young adults often face when living away from home for the first time. Covers topics like responsibilities and expenses that come with leasing an apartment, need for a budget, importance of choosing mature roommates, etc. $$$$

I'm Tired of a Messy Desk!

Teaching Aids Inc.

This video will help you and your viewers organize your desks for maximum use of space. Offers concrete tips on increasing personal work space efficiency. Common desk items which can break the flow of concentration are presented such as where to position personal items. $$$$

Locomotion

Teaching Aids Inc.

A tale of a spirited locomotive and caboose who are suddenly faced with a major obstacle while on their way to the station. They solve their dilemma by overcoming near impossible odds. Use this video to show leadership, problem solving, and creative solutions. $$$$

Negotiating...For Whatever You Want

Teaching Aids Inc.

An intense, informative discussion of the most successful negotiating techniques for use in your personal life. Applicable to everyday situations, this entertaining and educational program explains how to identify the issues in personal negotiations, and offers insights on how to test assumptions. $$

Personal Goals: Your Path to Success

Teaching Aids Inc.

This program presents several methods for planning and achieving goals. By examining important personal qualities necessary for achieving success, the student is asked to reflect on past accomplishments and failures, assess the present for interests and abilities, and plan for the future. $$$$

Risk Taking or Evolve or Dissolve

Teaching Aids Inc.

Covers how growth involves risk, that risks need to be motivated by wisdom and skill, different types of risk taking, the do's and don'ts of risk taking, and how one perceives risk taking. $$$

Sexual Harassment: The Other Point Of View

Teaching Aids Inc.

A lively video that helps young people understand exactly what sexual harassment is in a series of dramatic vignettes. $$$

Step 1: Be Good To Yourself

Teaching Aids Inc.

Covers concepts such as the importance of positive thoughts, taking responsibility for one's behavior, having the right to dream, and making choices to change one's life for the better. $$$

Step 2: Frog Kissing Or Be Good to Others

Teaching Aids Inc.

Demonstrates how by treating others fairly, one learns to treat oneself better. Concepts include looking beyond a person's physical appearance to learning how to reach out to others. $$$

Step 3: Empowerment Or You Are an Eagle Not a Chicken

Teaching Aids Inc.

Teaches students to understand their power, keep their power, and use their power wisely. $$$

Step 4: Belongingness Or Do We Have As Much Sense As a Goose?

Teaching Aids Inc.

Covers functional and dysfunctional groups, conflict management and connecting with others. $$$

Step 5: Models, Mentors, and Heroes Or The Helping Hand

Teaching Aids Inc.

Investigates the pros and cons of hero worship. $$

Step 7: It's Not Easy Being Green

Teaching Aids Inc.

Makes students aware of their own uniqueness and teaches them that uniqueness is a gift not a curse. $$$

Step 8: Just Do It

Teaching Aids Inc.

Stresses the importance of productivity and presents a six-part plan to accomplish plans and dreams. $$$

Step 9: Play and Laughter Or Chill Out

Teaching Aids Inc.

Stresses the importance of play and laughter in teen's lives and debunks some of the myths surrounding these two concepts. $$$

Successful Self-Management

MarkED

An excellent guide for achieving success by taking charge of your personal and professional life. This program provides a blueprint for you to assist your students as they evaluate their progress on the road to success. $$$$

Ta Da: A Series On Self-Esteem—Introduction

Teaching Aids Inc.

Viewing the Pep Rally familiarizes teens with the nine steps of the TA-DA Experience and explains how the programs will teach them to raise their "I Can" scores $$

Why Reading Is Important

Teaching Aids Inc.

Through the use of concrete examples of problems students may encounter in their everyday lives, this program demonstrates clearly that self esteem, work success and life satisfaction depend on reading skills. It answers a question often asked by poor readers: why do I have to read? $$$$

Film

Body Language

Learning Seed

Most personal communication is non-verbal. A course in communication is not complete without a study of how we use gestures, postures, eye movements, and personal space.

$$$

Safety

Videos

Avoiding Computer Strains and Pains

Teaching Aids Inc.

Reported cases of strains and injuries, ranging from back pain to headaches and eye irritation, have more than doubled over the past two years. This program addresses the most current, safe methods of working with computers. Accompanied by a booklet which covers key points of the presentation.

$$$$

Office Safety: It's a Jungle In There

Teaching Aids Inc.

Working in an office can be dangerous to your health. This video teaches common sense safety procedures. Students will learn how to prevent the causes of accidents before they happen: frayed carpet edges, cluttered or slippery floors, open file drawers, overloaded electrical outlets, etc. $$$

Ergonomics: Humanizing the Automated Office

Joyce and Wallersteiner — Teaching Aids

The first text for the educational market that deals with ergonomics and the balancing of productivity with employee health and comfort in the automated office. $

Leadership

Texts

Leadership Development, Second Edition
George Shinn — Glencoe
Helps students develop the personal attributes and social skills needed to succeed in the business world. Goal setting, personal appearance, memory, creativity, management, and employment are among the important topics discussed. $

Videos

Leadership Skills
Teaching Aids Inc.
Aaron Alejandro, former Texas State FFA President and accomplished speaker, conducts a fast-paced workshop designed to develop and hone leadership skills. Qualities such as communication skills, innovativeness, decisiveness, accountability, responsibility, self-confidence and the part they play are covered. $$$

Parliamentary Procedure I
Teaching Aids Inc.
Includes explanations and examples of the following motions: main motion, lay on the table, previous question, refer to a committee, amend, point of order, and appeal from the decision of the chair. The purpose, pertinent facts and an example of each motion is provided. $$$$

Parliamentary Procedure II
Teaching Aids Inc.
Includes explanations and examples of the following motions: suspend standing rules, division of the assembly, nominations and elections, parliamentary inquiry, leave to withdraw a motion, adjourn, take from the table, reconsider, recind, and opening and closing ceremonies. $$$

Tough-Minded Leadership
Teaching Aids Inc.
Provides fuel for decisiveness. At a time when self confidence and self-esteem are desperately needed, this video provides techniques and tools. In an era of counterproductive self-preoccupation, it provides the lift and pull of transcendent goals, visions and dreams. $$

Software—MS-DOS, Apple

Conduct of Meetings
Teaching Aids Inc.
Contains true/false and multiple choice questions. Covers the procedure of conducting meetings, the duties and responsibilities of officers and basic parliamentary procedure for beginning members are covered. Excellent for drilling newly elected officers. (Revised 1990) $$$ MS, AP

Parliamentary Procedure I
Teaching Aids Inc.
Table of motions—drills students on the categories of motions and their characteristics including second required, debatable, amendable, and vote required. Disk also has 25 multiple choice and 75 true/false questions. Excellent for preparing for student contests! $$$ AP

Parliamentary Procedure II
Teaching Aids Inc.
Designed for advanced study, this disk contains 280 questions (one-half multiple choice and one-half true/false) questions. Excellent for preparing for student contests!
$$$ AP

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Using the Matrices

The following matrices correlate the Academic Courses' Essential Elements, the TAAS objectives, and specific competencies for all of the office education curriculum areas. Social studies and science TAAS objectives have been included on the matrices since these areas will be included on the test beginning in 1993. These matrices are simply a starting point for identifying integration possibilities and can be used as a guideline for your own use of the materials.

The matrices give just one interpretation of correlations among these areas. The academic essential elements listed reflect a broad-based interpretation. The science area includes computers and general technology relating to office education. Many times a competency was placed in a specific basic skills area, but was not reflected in the TAAS objectives and vice versa. This seeming inconsistency reflects the way the academic essential element or TAAS objective reads and was interpreted in conjunction with activities from the curriculum.

Academic Courses' Essential Elements

English Language Arts: 75.61

1.	(b)(4)(A)	Expand vocabulary
2.	(c)(4)(F)	Follow complex directions
3.	(d)(1)(A)	Use the composing process to plan and generate writing
4.	(d)(4)(G)	Use various reference materials
5.	(e)(2)(D)	Use oral language in a variety of situations

Mathematics: 75.63

1.	(a)(1)(A)	Identify and use appropriate units of measure
2.	(a)(1)(B)	Solve problems involving measures
3.	(a)(1)(C)	Apply ratio and proportion
4.	(a)(3)(A)	Use the operations of addition, subtraction, multiplication, and division of whole numbers and integers in problem-solving situations
5.	(a)(3)(B)	Use fractions and their relative value
6.	(a)(3)(C)	Use the operations of addition, subtraction, multiplication, and division of fractions and decimals in problem-solving situations
7.	(a)(4)(A)	Compute income and wages
8.	(a)(4)(B)	Interpret deductions on paycheck stub
9.	(a)(4)(D)	Make budget
10.	(a)(4)(E)	Open and maintaining checking and savings account
11.	(a)(5)(C)	Measure
12.	(a)(5)(F)	Use graphs
13.	(a)(5)(G)	Use probability and statistics
14.	(a)(5)(H)	Work with personal finance
15.	(a)(6)(A)	Use counting methods and factorials
16.	(a)(6)(E)	Make predictions
17.	(b)(1)(A)	Interpret charts, tables, graphs and maps
18.	(b)(1)(C)	Determine wages and deductions from given information
19.	(b)(2)(A)	Find cost of: i. housing ii. food iii. transportation iv. clothing v. insurance
20.	(b)(2)(B)	Make decisions by comparing different types of the cost
21.	(b)(2)(C)	Find discounts, sales, rebates, coupons, etc.
22.	(b)(4)(A)	Investigate the use of credit cards and charge accounts
23.	(b)(4)(B)	Study options for loans
24.	(b)(5)(A)	Use banking forms

25.	(b)(5)(B)	Compare advantages and disadvantages of investments
26.	(b)(7)(A)	Calculate wages and deductions
27.	(b)(7)(B)	Develop a personal budget
28.	(c)(3)(B)	Use ratio and proportion
29.	(c)(3)(C)	Find percent and percentage
30.	(c)(3)(D)	Determine needs related to personal finance
31.	(c)(4)(C)	Use metric and customary units
32.	(c)(4)(D)	Find distance, perimeter, circumference, area, surface area and volume
33.	(d)(1)(A)	Develop the concept of measuring using measuring instruments
34.	(d)(1)(B)	Estimate measures
35.	(d)(4)(B)	Demonstrate a knowledge of similarity and similar figures
36.	(d)(4)(D)	Apply similarity to maps and scale drawings
37.	(d)(6)(C)	Find distance between points
38.	(d)(9)(B)	Compute circumference and area of circles
39.	(d)(10)(D)	Apply the formulas to practical problems related to capacity
40.	(g)(2)(B)	Understand symmetry
41.	(g)(2)(C)	Find area and volume
42.	(g)(3)(A)	Determine distance and betweeness
43.	(g)(3)(B)	Measure angles
44.	(i)(1)(A)	Understand aspects of free enterprise system and its benefits
45.	(i)(1)(B)	Investigate wages and deductions
46.	(i)(1)(C)	Investigate benefits offered by companies, unions, and organizations
47.	(i)(1)(D)	Investigate Social Security and Income Tax
48.	(i)(2)(A)	Understand credit financing
49.	(i)(2)(C)	Investigate local bank services
50.	(i)(2)(E)	Investigate different types of loans
51.	(i)(2)(F)	Investigate types of institutions that offer loans
52.	(i)(3)(A)	Food, shelter, clothes
53.	(i)(3)(B)	Transportation
54.	(i)(3)(C)	Insurance
55.	(i)(3)(D)	Medical and dental expenses
56.	(i)(3)(E)	Education
57.	(i)(3)(F)	Retirement and annuities
58.	(i)(3)(G)	Miscellaneous
59.	(i)(4)(A)	Make informed consumer decisions
60.	(i)(4)(B)	Practice sound money management

Science: 75.64

1.	(b)(2)(A)	Observe chemical reactions
2.	(b)(4)(A)	Describe chemical processes
3.	(b)(4)(B)	Explain meaningful arrangements of chemical information
4.	(b)(5)(A)	Measure chemical quantities
5.	(c)(5)(A)	Measure physical quantities
6.	(c)(7)(B)	Compare the functions of electronic circuits
7.	(c)(7)(C)	Compare the electrical efficiency of appliances
8.	(c)(10)(A)	Apply principles of physics to an investigation

9.	(d)(2)(A)	Observe physical and chemical properties of matter
10.	(d)(2)(B)	Observe the effects of forces on matter
11.	(d)(2)(C)	Explore magnetic and electrical interactions
12.	(d)(9)(B)	Manage an experimental apparatus to test a physical science hypothesis
13.	(d)(10)(A)	Finalyze the use of chemicals in everyday activities of the home
14.	(f) (1) (A)	Demonstrate the safe use of laboratory chemicals and equipment
15.	(g)(5)(B)	Plot data on graphs and other displays
16.	(h)(7)(A)	Compare physical interactions under varied conditions
17.	(h)(7)(B)	Evaluate the electrical efficiency of machines
18.	(i)(2)(B)	Examine earth materials (construction)
19.	(l)	Marine Science (the EE's of our few marine related programs should be compared to those in this course)
20.	(n)(2)(B)	Study safety hazards encountered by students and methods of eliminating the hazards
21.	(n)(4)(A)	Communicate laboratory and safety directions
22.	(p)(1)(E)	Develop skills in using materials and devices in a manner that minimizes danger to self and to society and maintains an acceptable level of erosion of the environment (safety practices, waste disposal)
23.	(p)(2)(A)	Organize thought process to accomplish goals (applications of electronics, photography)
24.	(p)(2)(E)	Adjust constructively to variations in needs resulting from individual differences that exist both within and among cultures in a healthy society
25.	(p)(4)(D)	Consider the consequences of personal actions (safety, chemical disposal)
26.	(p)(4)(D)	Develop a sense of personal worth in doing things for pleasure as well as in doing for others (hobbies)
Note:		75.64(Q) and (R) relating to aerospace-aviation should be compared to T & I Aviation related course EE's.
	(q)(1)(B)	Demonstrate investigative procedures and techniques
	(q)(4)(A)	Describe emergency procedures
	(r)(7)(C)	Analyze radio navigation systems (will be in some electronics or media technology courses)

Social Studies: 75.48

1.	(a)(1)(A)	Respect beliefs of other individuals
2.	(a)(1)(D)	Recognize that individuals must accept the consequences of their decisions
3.	(a)(2)(A)	Respect the principles that underlie the Texas and the United States Constitutions, the Bill of Rights, and the Declaration of Independence
4.	(a)(2)(C)	Value open-mindedness, tolerance of differing opinions, and civic participation as important aspects of democratic behavior
5.	(a)(2)(D)	Respect the laws of one's society and work responsibly to change laws that one judges to be unjust
6.	(a) (2) (E)	Understand the importance of individuals participation in civic affairs
7.	(a)(2)(G)	Recognize the value of compromise in the democratic process
8.	(a)(2)(J)	Support the democratic processes of the republican form of government
9.	(a)(2)(K)	Support the basic values of American society (e.g., justice, responsibilities, freedom, respect for the law, diversity, privacy, private property rights, free enterprise, and voluntary exchange)

10.	(a)(2)(L)	Support the rules and laws of one's school, community, state, and nation
11.	(a)(3)(B)	Support the role of profit in the American market system
12.	(a)(3)(E)	Recognize that citizens, through legal political activities, can influence economic decisions made by government
13.	(a)(4)(A)	Locate and gather information
14.	(a)(4)(B)	Observe for detail
15.	(a)(4)(C)	Translate information from one medium to another
16.	(a)(4)(D)	Organize and express ideas in written form
17.	(a)(4)(E)	Distinguish fact from opinion
18.	(a)(4)(F)	Analyze information
19.	(a)(4)(G)	Draw conclusions
20.	(a)(4)(H)	Synthesize information
21.	(a)(4)(J)	Use problem-solving skills

Social Studies: 75.68

1.	(b)(3)(D)	Explain the development and importance of new business and labor organizations
2.	(i)(3)(A)	Analyze the development of self concept
3.	(i)(3)(C)	Establish individual long- and short-range goals
4.	(k)(2)(D)	Undertake personal leadership in groups
5.	(k)(2)(E)	Accept leadership of others

Texas Assessment of Academic Skills
Instructional Targets
Language Arts (LAR)

DOMAIN: **Reading Comprehension**

Objective 1: The student will determine the meaning of words in a variety of written texts.

Objective 2: The student will identify supporting ideas in a variety of written texts.

Objective 3: The student will summarize a variety of written texts.

Objective 4: The student will perceive relationships and recognize outcomes in a variety of written texts.

Objective 5: The student will analyze information in a variety of written texts in order to make inferences and generalizations.

Objective 6: The student will recognize points of view, propaganda, and/or statements of fact and nonfact in a variety of written texts.

Texas Assessment of Academic Skills
Instructional Targets
Mathematics (Math)

DOMAIN: **Concepts**

Objective 1: The student will demonstrate an understanding of number concepts.

Objective 2: The student will demonstrate an understanding of mathematical relations, functions, and other algebraic concepts.

Objective 3: The student will demonstrate an understanding of geometric properties and relationships.

Objective 4: The student will demonstrate an understanding of measurement concepts using metric and customary units.

Objective 5: The student will demonstrate an understanding of probability and statistics.

DOMAIN: **Operations**

Objective 6: The student will use the operation of addition to solve problems.

Objective 7: The student will use the operation of subtraction to solve problems.

Objective 8: The student will use the operation of multiplication to solve problems.

Objective 9: The student will use the operation of division to solve problems.

DOMAIN: **Problem Solving**

Objective 10: The student will estimate solutions to a problem situation.

Objective 11: The student will determine solution strategies and will analyze or solve problems.

Objective 12: The student will express or solve problems using mathematical representation.

Objective 13: The student will evaluate the reasonableness of a solution to a problem situation.

Texas Assessment of Academic Skills
Instructional Targets
Written Communication (LAW)

DOMAIN: **Written Communication**

Objective 1: The student will respond appropriately in a written composition to the purpose/audience specified in a given topic.

Objective 2: The student will organize ideas in a written composition on a given topic.

Objective 3: The student will demonstrate control of the English language in a written composition on a given topic.

Objective 4: The student will generate a written composition that develops/supports/elaborates the central idea stated in a given topic.

Objective 5: The student will recognize appropriate sentence construction within the context of a written passage.

Objective 6: The student will recognize appropriate English usage within the context of a written passage.

Objective 7: The student will recognize appropriate spelling, capitalization, and punctuation within the context of a written passage.

Texas Assessment of Academic Skills
Instructional Targets
Science (Sci)

DOMAIN:	**Science**
Objective 1:	The student will acquire scientific data and/or information.
Objective 2:	The student will sequence, order, and/or classify scientific data and/or information.
Objective 3:	The student will communicate scientific data and/or information.
Objective 4:	The student will interpret scientific data and/or information.
Objective 5:	The student will make inferences from generalized statements and/or make predictions using scientific data and/or information.
Objective 6:	The student will identify a problem, formulate a hypothesis, and design and conduct a scientific investigation.
Objective 7:	The student will draw conclusions about the process(es) and/or outcome(s) of a scientific investigation.
Objective 8:	The student will relate and/or apply scientific and technological information to daily life.

Texas Assessment of Academic Skills
Instructional Targets
Social Studies (SS)

DOMAIN:	**Social Studies**
Objective 1:	The student will identify civic values and the rights and responsibilities of American citizenship.
Objective 2:	The student will identify American and other economic systems.
Objective 3:	The student will identify American and other political systems.
Objective 4:	The student will identify geographical concepts and information.
Objective 5:	The student will identify historical concepts and information.
Objective 6:	The student will identify sociological and cultural factors that affect human behavior.
Objective 7:	The student will interpret social studies data.
Objective 8:	The student will analyze relationships in social studies.
Objective 9:	The student will make generalizations about and draw inferences and conclusions from social studies information.
Objective 10:	The student will use problem-solving and decision-making skills in a social studies context.

Competency Checklist

Business Information Processing

(4 = Mastery—1 = Non-Mastery)

COMPETENCIES

I. Introduction to Business Information Processing

1. Introduction to the Course

NONE

2. Contemporary Office Systems

4 3 2 1 1. Define terminology related to information processing in the contemporary office.

4 3 2 1 2. Describe the organization of the office environment and the responsibilities required.

4 3 2 1 3. Discuss the information processing cycle.

4 3 2 1 4. Discuss hardware used in business.

4 3 2 1 5. Describe software used in business.

4 3 2 1 6. Identify emerging technology that impacts business information processing by using current literature.

3. Social Implications

4 3 2 1 1. Define terminology related to computer crime, computer users, and new computer devices and techniques.

4 3 2 1 2. Identify major issues and technological developments related to computers and society.

4 3 2 1 3. Describe ethical and legal issues that have arisen as a result of the computer revolution.

4 3 2 1 4. Identify privacy issues involved with electronic data storage.

4 3 2 1 5. Explain reasons for concern about the reliability of computer systems.

II. Word Processing

1. Word Processing Procedures

4 3 2 1 1. Identify terminology related to word processing.

4 3 2 1 2. Determine the meaning of word processing, its components, its diversity, and how it relates to the information processing cycle.

4 3 2 1 3. Discuss and demonstrate use of common word processing functions.

4 3 2 1 4. Create, spell check, use formatting options, and save documents.

COMPETENCIES

2. Document Production Procedures

4 3 2 1 1. Demonstrate the proper use of the document production cycle.

4 3 2 1 2. Identify basic parts and formats of business documents.

4 3 2 1 3. Apply proofreading skills to create mailable business documents.

4 3 2 1 4. Demonstrate the ability to perform a mail merge.

III. Business Communications

1. Writing Techniques

4 3 2 1 1. Identify and use business English terminology.

4 3 2 1 2. Demonstrate correct usage of the parts of speech, subject-verb agreement, expression of numbers and abbreviations, and sentence construction.

4 3 2 1 3. Apply correct punctuation, capitalization, and spelling rules.

4 3 2 1 4. Compose well-written business letters and documents.

2. Telephone Techniques

4 3 2 1 1. Identify traditional telephone terminology.

4 3 2 1 2. Describe telephone equipment and systems.

4 3 2 1 3. Discuss special telephone features and services.

4 3 2 1 4. Demonstrate characteristics of good listening skills.

4 3 2 1 5. Apply good telephone pronunciation and articulation techniques.

4 3 2 1 6. Demonstrate positive techniques of handling incoming and placing outgoing telephone calls.

COMPETENCIES

3. Transcription Techniques

4 3 2 1 1. Identify and discuss transcription media and equipment features.

4 3 2 1 2. Demonstrate efficient transcription techniques.

4 3 2 1 3. Demonstrate the ability to transcribe mailable business documents from dictated tapes.

IV. Information Management Tools

1. Records Management

4 3 2 1 1. Define terminology used in records management.

4 3 2 1 2. Demonstrate proper filing procedures.

4 3 2 1 3. Discuss micrographics and how it is used in records management.

4 3 2 1 4. Identify steps in transfer of files.

4 3 2 1 5. Demonstrate the ability to control manual records.

2. Database Management

4 3 2 1 1. Define terminology related to database management.

4 3 2 1 2. Demonstrate proper procedures to create, enter, store, and retrieve information from a database.

4 3 2 1 3. Print reports and information from the database.

4 3 2 1 4. Demonstrate the ability to export information from the database software and import the data into a word processing document.

3. Spreadsheets

4 3 2 1 1. Define the terminology related to spreadsheets.

4 3 2 1 2. Discuss spreadsheet applications used in business.

4 3 2 1 3. Demonstrate concepts for processing alphanumeric data.

4 3 2 1 4. Apply software capabilities to solve problems using a pre-designed template.

4 3 2 1 5. Print reports and graphs.

4 3 2 1 6. Export data from the spreadsheet software and import the data into a word processing document.

COMPETENCIES

V. Information Processing Tools

1. Telecommunications

4 3 2 1 1. Define terminology related to telecommunications and networks.

4 3 2 1 2. Identify equipment needed for telecommunications.

4 3 2 1 3. Discuss and apply procedures for communicating with electronic bulletin boards, on-line information services, electronic mail, voice mail, and facsimile transmissions.

4 3 2 1 4. Discuss equipment requirements for network configurations.

2. Desktop Publishing

4 3 2 1 1. Identify and use desktop publishing terminology.

4 3 2 1 2. Discuss components required for layout and design of desktop publishing products.

4 3 2 1 3. Demonstrate proper techniques for producing a publication using a thumbnail sketch, rough draft, and comprehensive layout.

4 3 2 1 4. Apply procedures for preparing text in word processing software and then importing the information into page layout software to insert appropriate graphics.

VI. Closure

NONE

Business Information Processing Integration Matrix

Section 1, Unit 1

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)		LAR; Obj. 1
2			(b)(4)(A) (d)(1)(A) (d)(4)(G)	(a)(4)((A)(C)(D)(F)(H)(J)	LAR: Obj. 1, 2, 3, 4 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 2, 8
3		(d)(2)(B) (p)(1)(E) (p)(2)(E)	(c)(4)(F) (d)(4)(G)	(a)(1)(A)(D) (a)(4)(A)(B)(D)(F)(G)(H)	LAR: Obj. 3, 5 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 2, 8
4	(a)(1)(B)	(p)(1)(E) (p)(2)(A) (p)(4)(D)	(c)(4)(F) (d)(4)(G)	(a)(4)(F)(H)(J)	LAR: Obj. 3, 4, 5 LAW; Obj. 1, 2 Math; Obj. 1, 10, 11, 13 Sci; Obj. 2, 8

Business Information Processing Integration Matrix

Section 1, Unit 2

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)	(a)(1)(A)	LAR; Obj. 1
2			(d)(1)(A) (d)(4)(G)	(a)(2)(E)(K)(L) (a)(3)(B) (a)(4)(D)(F)(G)(H)	LAR: Obj. 2, 3, 4 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 2, 8 SS; Obj. 6, 8
3		(p)(1)(E) (p)(2)(A) (p)(4)(D)	(c)(4)(F) (d)(4)(G)	(a)(1)(D) (a)(2)(K) (a)(4)(A)(B)(C)(D)(F)(H)	LAR: Obj. 3, 5 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 2, 8
4		(c)(7)(B)	(d)(4)(G)	(a)(4)(A)(F)(H)(J)	LAR: Obj. 4, 5 LAW; Obj. 1, 2 Sci; Obj. 2, 8 SS; Obj. 5
5	(a)(3)(A)(C) (b)(2)(B) (i)(1)(A) (i)(4)(A)	(p)(1)(E) (p)(2)(A)(E)	(d)(4)(G)	(a)(1)(A) (a)(2)(C)(K)(L) (a)(3)(B) (a)(4)(A)(B)(F)(G)(H)(J)	LAR; Obj. 4, 5 LAW; Obj. 1, 2, 3, 4 Math; Obj. 1, 2, 11 Sci; Obj. 1, 3, 5, 8 SS; Obj. 2, 6, 10
6		(c)(7)(B)(C) (h)(7)(B)	(d)(1)(A) (d)(4)(G)	(a)(2)(K) (a)(3)(B) (a)(4)(A)(F)(H)	LAR; Obj. 5 LAW; Obj. 1, 2, 3 Sci; Obj. 1, 2, 3, 4, 8 SS; Obj. 5

Business Information Processing Integration Matrix

Section 1, Unit 3

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)		LAR; Obj. 1
2		(c)(7)(B)(C) (h)(7)(B)	(d)(4)(G)	(a)(2)(K) (a)(3)(B) (a)(4)(A)(F)(H)	LAR: Obj. 5 LAW; Obj. 1, 2, 3 Sci; Obj. 1, 2, 3, 4, 8 SS; Obj. 5
3		(p)(1)(E) (p)(2)(A) (p)(4)(D)	(c)(4)(F) (d)(4)(G)	(a)(1)(A)(D) (a)(2)(A)(C)(K)(L) (a)(3)(E) (a)(4)(A)(E)(F)(G)(H)	LAR: Obj. 2, 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 1, 2, 3, 4, 8 SS; Obj. 1, 3, 5, 6, 9
4		(c)(7)(B)(C) (p)(1)(E)	(d)(4)(G)	(a)(1)(A)(D) (a)(2)(A)(K)(L) (a)(3)(E) (a)(4)(A)(F)(G)(H)	LAR: Obj. 2, 3, 5, 6 LAW; Obj. 1, 2, 3 Sci; Obj. 1, 4, 5, 8 SS; Obj. 1, 3, 6, 9
5		(c)(7)(C) (d)(2)(B)(C) (f)(1)(A) (p)(1)(E) (p)(4)(D)	(c)(4)(F) (d)(4)(G)	(a)(1)(A) (a)(4)(A)(B)(D)(E)(F)(G)(H)	LAR; Obj. 2, 3, 4, 5, 6 LAW; Obj. 1, 2, 3 Sci; Obj. 1, 2, 4, 8 SS; Obj. 5, 6

Business Information Processing Integration Matrix

Section 2, Unit 2

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1	(a)(1)(A)(B) (a)(5)(C) (d)(1)(A)(B)	(p)(2)(A)	(c)(4)(F) (d)(4)(G)	(a)(4)(B)(F)(H)(J)	LAR; Obj. 5 LAW; Obj. 5, 6, 7 Math; Obj. 1, 10, 11, 12, 13 Sci; Obj. 5
2	(a)(1)(A)(B) (a)(5)(C) (d)(1)(A)(B)	(p)(2)(A)	(d)(4)(G) (c)(4)(F)	(a)(4)(A)(B)(F)(H)(J)	LAR: Obj. 5 LAW; Obj. 5, 6, 7 Math; Obj. 1, 10, 11, 12, 13 Sci; Obj. 5
3		(p)(2)(A)	(c)(4)(F) (d)(4)(G)	(a)(4)(B)F)(H)(J)	LAR: Obj. 5 LAW; Obj. 5, 6, 7 Sci; Obj. 5
4	(a)(1)(B)	(p)(1)(E) (p)(2)(A) (p)(4)(D)	(c)(4)(F) (d)(4)(G)	(A)(4)(F)(H)(J)	LAR: Obj. 3, 4, 5 LAW; Obj. 1, 2 Math; Obj. 1, 10, 11, 13 Sci; Obj. 2, 8

Business Information Processing Integration Matrix

Section 3, Unit 1

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)		LAR; Obj. 1
2			(d)(1)(A) (d)(4)(G)		LAW; Obj. 1-6
3			(b)(4)(A) (d)(1)(A) (d)(4)(G)		LAW; Obj. 1, 7
4			(c)(4)(F) (d)(1)(A) (d)(4)(G)	(a)(4)(B)(F)(H)(J)	LAR: Obj. 1, 2, 3, 4 LAW; Obj. 1-7

Business Information Processing Integration Matrix

Section 3, Unit 2

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)		LAR; Obj. 1
2		(c)(7)(B)(C) (h)(7)(B)	(d)(4)(G)	(a)(4)(A)(B)(D)(H)	LAR; Obj. 3, 5 LAW; Obj. 1, 2 Sci; Obj. 1, 3 SS; Obj. 7
3		(c)(7)(B)(C) (h)(7)(B)	(d)(4)(G)	(a)(4)(A)(F)(G)(H)	LAR; Obj. 3, 5 LAW; Obj. 2, 4 Sci; Obj. 1, 2, 8 SS; Obj. 5, 6
4			(c)(4)(F)		
5		(c)(7)(B) (p)(2)(A) (p)(4)(D)	(c)(4)(F) (d)(1)(A) (d)(4)(G) (e)(2)(D)	(a)(4)(A)(B)(C)(D)(F)(H)(J)	LAR; Obj. 3, 4, 5 LAW; Obj. 1-7 Sci; Obj. 1, 3, 8 SS; Obj. 5, 6
6		(c)(7)(B) (p)(2)(A) (p)(4)(D)	(c)(4)(F) (d)(1)(A) (d)(4)(G) (e)(2)(D)	(a)(4)(A)(B)(C)(D)(F)(H)(J)	LAR; Obj. 3, 4, 5 LAW; Obj. 1-7 Sci; Obj. 1, 3, 8 SS; Obj. 5, 6

Business Information Processing Integration Matrix

Section 3, Unit 3

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1		(c)(7)(B)(C) (h)(7)(B)	(b)(4)(G)	(a)(4)(A)(F)(G)(H)	LAR; Obj. 3, 5 LAW; Obj. 2, 4 Sci; Obj. 1, 2, 8 SS; Obj. 5, 6
2			(d)(1)(A)	(a)(4)(B)(C)(F)	LAW; Obj. 2, 5, 6, 7
3	(a)(1)(A)(B) (a)(5)(C) (d)(1)(A)(B)	(p)(2)(A)	(c)(4)(F) (d)(1)(A) (d)(4)(G)	(a)(4)(B)(C)(F)(H)(J)	LAR; Obj. 5 LAW; Obj. 2, 5, 6, 7 Math; Obj. 1, 10, 11, 12, 13 Sci; Obj. 5

Business Information Processing Integration Matrix

Section 4, Unit 1

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)		LAR; Obj. 1
2			(c)(4)(F) (d)(4)(G)	(a)(4)(B)(H)(J)	LAR; Obj. 4 LAW; Obj. 1 Sci; Obj. 2
3			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(B)(C)(D)(F)(G)(H)	LAR; Obj. 3, 4 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 2, 3
4		(p)(2)(A)	(c)(4)(F) (d)(4)(G)	(a)(4)(F)(G)(H)	LAR; Obj. 4, 5 LAW; Obj. 1, 2 Math; Obj. 1, 11 Sci; Obj. 2
5		(p)(2)(A)	(c)(4)(F) (d)(4)(G)	(a)(4)(B)(F)(G)(H)	LAR; Obj. 4, 5 LAW; Obj. 1, 2 Math; Obj. 1, 11 Sci; Obj. 2

Business Information Processing Integration Matrix

Section 4, Unit 2

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)		LAR; Obj. 1
2	(b)(2)(B)	(p)(2)(A)	(c)(4)(F)	(a)(4)(A)(B)(C)(H)(J)	LAR; Obj. 4, 5 LAW; Obj. 2 Math; Obj. 1, 10, 11, 13 Sci; Obj. 1, 2, 8 SS; Obj. 5, 10
3		(p)(2)(A) (p)(4)(D)	(c)(4)(F) (d)(4)(G)	(a)(4)(B)(C)(F)(H)(J)	LAR; Obj. 5 LAW; Obj. 2 Math; Obj. 2, 10, 11, 13 Sci; Obj. 2, 8 SS; Obj. 10
4	(a)(1)(A)(B) (a)(5)(C) (c)(4)(C) (d)(1)(A)(B)	(p)(2)(A)(E)	(c)(4)(F) (d)(4)(G)	(a)(4)(B)(C)(F)(H)(J)	LAR; Obj. 2, 3, 4 LAW; Obj. 2 Math; Obj. 1, 10 Sci; Obj. 2, 8

Business Information Processing Integration Matrix

Section 4, Unit 3

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)		LAR; Obj. 1
2	(i)(1)(A)	(p)(2)(A)	(c)(4)(F)	(a)(4)(A)(F)(H)	LAR; Obj. 2, 3 LAW; Obj. 1, 2, 3, 4 Math; Obj. 1 Sci; Obj. 1, 2, 3
3			(d)(4)(G)	(a)(4)(D)(G)(H)(J)	LAR; Obj. 2, 3, 4 LAW; Obj. 1, 2, 3, 4 Math; Obj. 1, 2, 10, 11, 13 Sci; Obj. 8
4	(a)(3)(A)(C) (a)(4)(A)(D)(E) (a)(5)(H) (a)(6)(A)(E) (b)(1)(C) (b)(2)(A)(B)(C) (b)(7)(A)(B) (c)(3)(C)(D) (d)(10)(D) (i)(1)(A)(B) (i)(3)(A)(B)(C)(D)(E)(F)(G)	(p)(1)(E) (p)(2)(A)(E)	(c)(4)(F) (d)(4)(G)	(a)(2)(K) (a)(3)(B) (a)(4)(A)(B)(C)(E)(F)(G)(H)(J)	LAR; Obj. 5 LAW; Obj. 7 Math; Obj. 1, 2, 6, 7, 8, 9, 10, 11, 12, 13 Sci; Obj. 1, 2, 5, 8 SS; Obj. 9, 10
5	(a)(5)(F)(G) (a)(6)(E) (b)(1)(A) (b)(2)(B)	(g)(5)(B) (h)(7)(A) (p)(2)(A)	(d)(4)(G)	(a)(4)(A)(B)(C)(F)(G)(H)(J)	LAR; Obj. 3, 4, 5 LAW; Obj. 1 Math; Obj. 1, 2, 3, 5, 11, 12, 13 Sci; Obj. 1, 2, 3, 8 SS; Obj. 5, 7, 8, 9
6	(a)(1)(A)(B) (a)(3)(A)(B)(C) (a)(5)(C)(F) (a)(6)(E) (b)(1)(A) (c)(4)(C) (d)(1)(A)(B) (g)(3)(A)(B)	(p)(2)(A)(E)	(c)(4)(F) (d)(1)(A) (d)(4)(G)	(a)(1)(A)(D) (a)(2)(C)(E)(K) (a)(4)(A)(B)(C)(D)(F)(G)(H)(J)	LAR; Obj. 2, 3, 4 LAW; Obj. 1-7 Math; Obj. 1-13 Sci; Obj. 1-8 SS; Obj. 5, 6, 7

Business Information Processing Integration Matrix

Section 5, Unit 1

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)		LAR; Obj. 1
2		(c)(7)(B)(C) (h)(7)(B) (p)(2)(A)	(d)(1)(A) (d)(4)(G)	(a)(1)(A) (a)(2)(C) (a)(4)(A)(B)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 3, 5, 6 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 1, 2, 3, 8 SS; Obj. 5
3		(c)(7)(B) (p)(2)(A) (p)(4)(D)	(c)(4)(F) (d)(1)(A) (d)(4)(G) (e)(2)(D)	(a)(4)(A)(B)(C)(D)(F)(H)(J)	LAR; Obj. 3, 4, 5 LAW; Obj. 1-7 Sci; Obj. 1, 3, 8 SS; Obj. 5, 6
4		(c)(7)(B)(C) (h)(7)(B) (p)(2)(A)	(d)(1)(A) (d)(4)(G)	(a)(1)(A) (a)(2)(C) (a)(4)(A)(B)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 3, 5, 6 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 1, 2, 3, 8 SS; Obj. 5

Business Information Processing Integration Matrix

Section 5, Unit 2

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)		LAR; Obj. 1
2		(c)(7)(B)(C) (h)(7)(B) (p)(2)(A)	(d)(1)(A) (d)(4)(G)	(a)(1)(A) (a)(2)(C) (a)(4)(A)(B)(C)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 3, 5, 6 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 1, 2, 3, 8 SS; Obj. 5
3	(a)(1)(A)(B) (a)(3)(B)(C) (a)(5)(C) (c)(4)(C) (d)(1)(A)(B) (g)(3)(B)	(p)(2)(A)	(c)(4)(F) (d)(4)(G)	(a)(2)(C)(D)(E)(K)(L) (a)(4)(A)(B)(C)(D)(F)(G)(H)(J)	LAR; Obj. 2, 3, 4 LAW; Obj. 1-7 Math; Obj. 1, 3, 4, 10, 11, 12, 13 Sci; Obj. 6, 7 SS; Obj. 5, 6, 10
4	(a)(1)(A)(B) (a)(5)(C) (c)(4)(C) (d)(1)(A)(B)	(p)(2)(A)(E)	(c)(4)(F) (d)(4)(G)	(a)(4)(B)(C)(F)(H)(J)	LAR; Obj. 2, 3, 4 LAW; Obj. 2 Math; Obj. 1, 10 Sci; Obj. 2, 8

Competency Checklist

Common Essential Elements

(Mastery = 4, Non-Mastery = 1)

COMPETENCIES

I. Leadership

4 3 2 1 1. Explain the role of leadership in our society.
4 3 2 1 2. List advantages and disadvantages of becoming a leader.
4 3 2 1 3. Name and describe three leadership styles.
4 3 2 1 4. List the basic principles of parliamentary procedure.
4 3 2 1 5. Describe the essentials of a good meeting.
4 3 2 1 6. Explain the function and purpose of committees.
4 3 2 1 7. Write the order of business for a meeting.
4 3 2 1 8. Participate in orderly meetings conducted according to parliamentary procedure.
4 3 2 1 9. Identify characteristics and responsibilities of effective group members.
4 3 2 1 10. Plan and conduct leadership activities.

II. Successful Employment

4 3 2 1 1. Identify skills necessary for employment in a business situation.
4 3 2 1 2. Identify sources to use when seeking employment.
4 3 2 1 3. Prepare a resume and a letter of application.
4 3 2 1 4. Complete an application form.
4 3 2 1 5. Demonstrate proper interview and communication techniques.
4 3 2 1 6. Describe the components of ethical conduct on the job.
4 3 2 1 7. Apply principles of time management.
4 3 2 1 8. Describe the importance of organizational policies and procedures.

III. Entrepreneurship

4 3 2 1 1. Define terms/traits associated with entrepreneurship concepts and skills.
4 3 2 1 2. Describe why learning entrepreneurship concepts and skills is important.
4 3 2 1 3. Discuss those reasons why starting a small business may be beneficial.
4 3 2 1 4. Recognize those personality traits which are common to successful entrepreneurs.
4 3 2 1 5. Discuss those factors which should be considered before opening a small business.

COMPETENCIES

4 3 2 1 6. Compare and contrast the risks and rewards of entrepreneurship.
4 3 2 1 7. Recognize the difference between the various economic systems.
4 3 2 1 8. Explain the role of small business in the free enterprise economic system.

IV. Safety

1. Identify general safety procedures and concepts in the business working world, including:
4 3 2 1 a. Describe accident causes and prevention.
4 3 2 1 b. Identify government involvement in safety.
4 3 2 1 c. Identify safe working practices employed in the office.
4 3 2 1 d. Recognize areas of computer safety.

V. Human Relations and Personality Development

4 3 2 1 1. Describe grooming habits, personal hygiene, and clothing wardrobe appropriate for office.
4 3 2 1 2. Identify factors of human relations that allow understanding of self and others.
4 3 2 1 3. Analyze basic human relation problems as they relate to business success.

VI. Personal and Business Management.

4 3 2 1 1. Explain the management process and identify the role and functions of business management including the lines of authority and effective supervisory techniques.
4 3 2 1 2. Explain how management assists in reaching personal and family goals.
4 3 2 1 3. Describe the role of management in controlling stress.
4 3 2 1 4. Identify and understand different financial institutions.
4 3 2 1 5. Identify and understand personal checking accounts.
4 3 2 1 6. Identify and understand the personal loan application processes.

Common Essential Elements Integration Matrix

Leadership

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48, 75.68)	TAAS Objectives
1			(d)(1)(A) (d)(4)(G)	(a)(1)(A)(D) (a)(2)(A)(C)(D)(E)(G)(J)(K)(L) (a)(4)(D)(H)	LAR; Obj. 3, 4 LAW; Obj. 1, 2, 3, 4 SS; Obj. 1, 3, 6, 8
2			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(B)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 3, 4, 5 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 7, 8, 9, 10
3			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(B)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 3, 4, 5 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 7, 8, 9, 10
4			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(B)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 3, 4, 5 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 7, 8, 9, 10
5			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(B)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 3, 4, 5 LAW; Obj. 1, 2, 3, 4 SS; Obj. 1, 6, 7, 8, 9, 10
6			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(B)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 3, 4, 5 LAW; Obj. 1, 2, 3, 4 SS; Obj. 1, 6, 7, 8, 9, 10
7			(d)(1)(A)	(a)(4)(A)(D)(J)	LAW; Obj. 1, 2
8				(k)(2)(D)(E)	SS; Obj. 1, 3, 9, 10
9			(d)(1)(A)	(a)(1)(A)(D) (a)(2)(C)(D)(K)(L) (a)(4)(A)(D)(E)(F)(H)(J) (k)(2)(D)(E)	LAR; Obj. 2, 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 1, 3, 6, 9, 10

Common Essential Elements Integration Matrix

Successful Employment

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48, 75.68)	TAAS Objectives
1			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(D)(F)(J)	LAR; Obj. 2, 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 10
2			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(D)(F)(J)	LAR; Obj. 2, 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 10
3			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(D)(H)(J)	LAR; Obj. 3, 5 LAW; Obj. 1-7
4			(c)(4)(F) (d)(1)(A)	(a)(4)(D)(F)(H)(J)	LAR; Obj. 4, 5 LAW; Obj. 1, 2 SS; Obj. 9, 10
5			(c)(4)(F) (e)(2)(D)	(a)(4)(C)(F)(H)(J)	
6		(p)(1)(E) (p)(2)(E) (p)(4)(D)	(c)(4)(F) (d)(4)(G)	(a)(1)(A)(D) (a)(2)(A)(C)(K)(L) (a)(3)(E) (a)(4)(A)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 1, 2, 3, 4, 8 SS; Obj. 1, 3, 5, 6, 9
7			(d)(4)(G)	(a)(4)(A)(F)(J)	LAR; Obj. 4, 5 LAW; Obj. 1 Math; Obj. 1, 10, 11, 13
8			(d)(1)(A) (d)(4)(G)	(a)(1)(A)(D) (a)(2)(C)(D)(E)(G)(K)(L) (a)(3)(E) (a)(4)(D)(F)(G)(H)(J)	LAR; Obj. 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 1, 3, 6, 9, 10

Common Essential Elements Integration Matrix

Entrepreneurship

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1			(b)(4)(A)		LAR; Obj. 1
2			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(D)(F)(H)(J) (b)(3)(D)	LAR; Obj. 2, 3, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 1, 2, 6, 9, 10
3			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(D)(F)(H)(J) (b)(3)(D)	LAR; Obj. 2, 3, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 1, 2, 6, 9, 10
4			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(B)(D)(F)(G)(J) (b)(3)(D) (i)(3)(A)	LAR; Obj. 2, 4, 5 LAW; Obj. 1, 2
5			(d)(1)(A) (d)(4)(G)	(a)(1)(A)(D) (a)(2)(A)(C)(D)(J)(K)(L) (a)(3)(B)(E) (a)(4)(A)(D)(F)(H)(J) (b)(3)(D) (i)(3)(C)	LAR; Obj. 2, 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 1, 2, 6, 8, 9, 10
6			(d)(1)(A) (d)(4)(G)	(a)(3)(B)(E) (a)(4)(A)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 8, 9, 10
7			(d)(1)(A) (d)(4)(G)	(a)(3)(B)(E) (a)(4)(A)(D)(E)(F)(G)(H)(J)	LAR; Obj. 2, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 8, 9, 10
8			(d)(1)(A) (d)(4)(G)	(a)(2)(A)(C)(E)(G)(J)(K)(L) (a)(3)(B)(E) (a)(4)(D)(F)(G)(H)(J)	LAR; Obj. 3, 4, 5, 6 LAW; Obj. 1-7 SS; Obj. 1, 2, 6, 9, 10

Common Essential Elements Integration Matrix

Safety

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48)	TAAS Objectives
1		(c)(7)(B)(C) (n)(2)(B) (n)(4)(A) (p)(1)(E) (p)(4)(D)	(d)(1)(A) (d)(4)(G)		LAR; Obj. 3, 4, 5 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 8
a		(c)(7)(B)(C) (n)(2)(B) (n)(4)(A) (p)(1)(E) (p)(4)(D)	(d)(1)(A) (d)(4)(G)		LAR; Obj. 2, 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 2, 3, 8
b		(n)(2)(B) (n)(4)(A) (p)(1)(E)	(d)(1)(A) (d)(4)(G)	(a)(2)(C)(D)(K)(L) (a)(4)(D)(F)(H)	LAR; Obj. 2, 3, 4 LAW; Obj. 1, 2, 3, 4 SS; Obj. 1, 3, 6
c		(c)(7)(B)(C) (n)(2)(B) (n)(4)(A) (p)(1)(E) (p)(4)(D)	(d)(1)(A) (d)(4)(G)		LAR; Obj. 3, 4, 5 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 8
d		(n)(2)(B) (n)(4)(A) (p)(1)(E)	(d)(1)(A) (d)(4)(G)		LAR; Obj. 2, 3, 4 LAW; Obj. 1, 2, 3, 4 Sci; Obj. 1, 3, 4, 8

Common Essential Elements Integration Matrix

Human Relations and Personality Development

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48, 75.68)	TAAS Objectives
1			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(D)(J) (i)(3)(A)	LAR; Obj. 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 10
2			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(D)(J) (i)(3)(A)	LAR; Obj. 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 10
3			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(D)(J) (b)(3)(D)	LAR; Obj. 3, 4, 5, 6 LAW; Obj. 1, 2, 3, 4 SS; Obj. 2, 6, 10

Common Essential Elements Integration Matrix

Personal and Business Management

Competency	Math (75.63)	Science (75.64)	Language Arts (75.61)	Social Studies (75.48, 75.68)	TAAS Objectives
1			(d)(1)(A) (d)(4)(G)	(a)(1)(A) (a)(2)(C)(K)(L) (a)(4)(A)(D)(F)(G)(H)(J) (b)(3)(D) (k)(2)(D)(E)	LAR; Obj. 2, 3, 4, 5 LAW; Obj. 1, 2, 3, 4 SS; Obj. 1, 6, 8, 9, 10
2			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(D)(F)(H) (i)(3)(C)	LAR; Obj. 3, 4, 5 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 9, 10
3			(d)(1)(A) (d)(4)(G)	(a)(4)(A)(D)(F)(H)	LAR; Obj. 3, 4, 5 LAW; Obj. 1, 2, 3, 4 SS; Obj. 6, 8, 10
4	(i)(1)(A) (i)(2)(C)(F)		(d)(1)(A) (d)(4)(G)	(a)(3)(E) (a)(4)(A)(D)(F)(G)(H)(J)	LAR; Obj. 3, 4, 5 LAW; Obj. 1, 2, 3, 4 SS; Obj. 2, 6, 7, 8, 9, 10
5	(a)(3)(A)(C) (a)(4)(E) (a)(5)(H) (b)(5)(A) (c)(3)(D) (i)(1)(A)		(c)(4)(F) (d)(4)(G)	(a)(4)(C)(F)(J)	LAR; Obj. 3, 4 LAW; Obj. 1, 2 Math; Obj. 1, 2, 6, 7, 8, 9, 10, 11, 12, 13 SS; Obj. 2, 6
6	(a)(5)(H) (b)(2)(B)(C) (b)(4)(B) (b)(5)(A) (c)(3)(D) (i)(1)(A) (i)(2)(A)(C)(E)(F)		(c)(4)(F) (d)(4)(G)	(a)(4)(C)(F)(J)	LAR; Obj. 3, 4 LAW; Obj. 1, 2 Math; Obj. 1, 2, 6, 7, 8, 9, 10, 11, 12, 13 SS; Obj. 2, 6

COMPLIANCE STATEMENT

TITLE VI, CIVIL RIGHTS ACT OF 1964; THE MODIFIED COURT ORDER, CIVIL ACTION 5281, FEDERAL DISTRICT COURT, EASTERN DISTRICT OF TEXAS, TYLER DIVISION

Reviews of local education agencies pertaining to compliance with Title VI Civil Rights Act of 1964 and with specific requirements of the Modified Court Order, Civil Action No. 5281, Federal District Court, Eastern District of Texas, Tyler Division are conducted periodically by staff representatives of the Texas Education Agency. These reviews cover at least the following policies and practices:

(1) acceptance policies on student transfers from other school districts;

(2) operation of school bus routes or runs on a non-segregated basis;

(3) nondiscrimination in extracurricular activities and the use of school facilities;

(4) nondiscriminatory practices in the hiring, assigning, promoting, paying, demoting, reassigning, or dismissing of faculty and staff members who work with children;

(5) enrollment and assignment of students without discrimination on the basis of race, color, or national origin;

(6) nondiscriminatory practices relating to the use of a student's first language; and

(7) evidence of published procedures for hearing complaints and grievances.

In addition to conducting reviews, the Texas Education Agency staff representatives check complaints of discrimination made by a citizen or citizens residing in a school district where it is alleged discriminatory practices have occurred or are occurring.

Where a violation of Title VI of the Civil Rights Act is found, the findings are reported to the Officer for Civil Rights, Department of Health, Education and Welfare.

If there is a direct violation of the Court Order in Civil Action No. 5281 that cannot be cleared through negotiations, the sanctions required by the Court Order are applied.

TITLE VII, CIVIL RIGHTS ACT OF 1964; EXECUTIVE ORDERS 11246 AND 11375; TITLE IX, 1973 EDUCATION AMENDMENTS; REHABILITATION ACT OF 1973 AS AMENDED; 1974 AMENDMENTS TO THE WAGE-HOUR LAW EXPANDING THE AGE DISCRIMINATION IN EMPLOYMENT ACT OF 1967; AND VIETNAM ERA VETERANS READJUSTMENT ASSISTANCE ACT OF 1972 AS AMENDED IN 1974.

It is the policy of the Texas Education Agency to comply fully with the nondiscrimination provisions of all federal and state laws and regulations by assuring that no person shall be excluded from consideration for recruitment, selection, appointment, training, promotion, retention, or any other personnel action, or be denied any benefits or participation in any programs or activities which it operates on the grounds of race, religion, color, national origin, sex, handicap, age, or veteran status (except where age, sex, or handicap constitute a bona fide occupational qualification necessary to proper and efficient administration). The Texas Education Agency makes positive efforts to employ and advance in employment all protected groups.

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